In Other Words...

Another year has flown by and here we are at January again ready to start over again with new resolutions to break old habits. In the past, I have made it all the way to March (in the best of times) without succumbing to temptation. However, according to Isaac Newton's first law, "An object that is not subject to any outside forces moves at a constant velocity, covering equal distances in equal times along a straight line path." That's a fancy way of saying that inertia gets you in the end and if you're stuck on the couch it will take something extraordinary to move you (usually the call of nature, meal time or a spouse making up a Honey-Do list when you have intimate plans with the television or, hopefully, a ham project that has suddenly caught your interest and just won't let go). "As above, so below" and so it has always been. It takes a minimum of six weeks to form a new habit, but old habits years in the making take a lot longer to dislodge, demanding a concerted and concentrated effort to keep to the straight and narrow path you've marked out for yourself. If your New Year's Resolutions didn't last beyond the end of January or the middle of February, you have a valid excuse, and an even more valid excuse if you lasted longer. Just smile and point to Newton.

However, it does help to have a plan or at least a schedule (if money is involved it helps a lot more). For me, the newsletter is one more form of editing and writing I have done for decades, so it isn't difficult to get motivated. Besides, I know there will be a few angry and disappointed readers out there who have become used to seeing the Ø-

Beat every month – no matter who puts it together – and begin complaining to the board and anyone who will listen that someone fell asleep at the switch or decided the newsletter wasn't important enough to get out on time. Well, you don't have to worry, at least not for the foreseeable future, because this is one habit I look forward to doing every month.

That being said, I'm finding it increasingly more difficult to put together a newsletter without content and I am sure you're getting tired of me pontificating and putting together things I think are interesting. Without input from the club members and local hams, the only thing I'll have left to publish is news from other clubs who are more active and more involved in what their club and, by extension the members, are doing. In lieu of news from the PPRAA's members, it's nice to know there are thousands of active amateur radio clubs across the nation who are more involved and willing to provide articles and news of interest, such as the article on the solar activity by George McCray AGØS of one of the Denver radio clubs. I found the information interesting, and hope you will agree.

Last month's solar activity isn't the only thing in the news either. The PPRAA held their annual Christmas party at the Golden Corral on Woodmen and a fine time was had by all – all except me because I was stuck working . . . again. I wanted to congratulation Les Borst KCØNC and Jim Harris ABØUK for winning the first lifetime achievement awards. We had a long list of candidates but Jim and Les stood out for their unselfishness and generosity to the PPRAA, amateur radio and the community. Both these men have given tirelessly over the years and are great ambassadors for amateur radio and the PPRAA. In the coming years, we will honor more men and

women like Les and Jim with long overdue thanks for keeping the lights on.

This month, as you will read in President Doug Nielsen's column, club meetings will be held in the East Library at 5550 North Union Blvd, same time on the second Wednesday of the month. You can download a map at PPLD.org.

We should also thank Susan Allison KCØSYA for the wonderful job she did arranging for all the prizes from the following:

- ➢ Texas Roadhouse
- ➢ Famous Dave's
- ➢ Golden Corral
- ➢ Bird Dog BBQ
- ➢ Front Range BBQ
- ➢ Mimi's Restaurant
- ➢ Jason's Deli
- ➢ Fargo's Pizza
- ➢ Elephant Bar
- ➢ Outback Steakhouse
- ➢ PF Chang's
- ➢ Broadway Deli
- ➢ Cinemark
- ➢ Rick, KØSU

Susan has done a great job of twisting arms and arranging for great prizes and I hope she looks forward to doing it again for this year's Christmas party. She certainly has a talent for hitting the deadline with lots of great prizes. And thanks go to Ken Sheehan KDØAGV for providing the pictures that follow. More pictures will be posted I the PDF version of the newsletter available online.

Last year was a year to remember and one that certainly goes down in the books as exciting, if you don't mind biting your nails and sweating a lot. We almost didn't have a chairman for the Megafest in June, but Rob Roller N7LV, who has given so much in the past as president, vice-president, editor of the Ø-Beat and chairman/member of so many other organizations and events, pulled our fat out of the fire and put together a great event in spite of a heavy work schedule. Mike Anderson WV7T, who regularly, sends in dits and bits of information, certificates and humor, managed Field Day at a totally new location, Firehouse 1 in Monument, Colorado, and has decided he liked doing the job so much he took on this year's Field Day as well, with Jim ABØUK handling digital. But don't fret, there are plenty more opportunities to join in and take your turn at the wheel.

In fact, I was so inspired I took on the job as PPRAA's Volunteer Examiner contact. There isn't all that much to do, but it's worth getting involved in more ways than just showing up for VE sessions the second Saturday of six months out of twelve. Of course, Dennis NØABC didn't mention anything about lady truck drivers who have CB licenses calling and asking for information and talking for two hours before I took the job. Good thing I have all those years of experience cutting off long-winded politicians I have had to interview without incurring their wrath and not wanting to talk to me ever again. I just knew that would come in handy some day.

The late Steve Williams KØSRW (no, he didn't die; he's always late with his articles) finishes up his series of articles on creating web sites with Joomla. If you haven't caught it yet, you can still catch the first two parts on the PPRAA web site if you download the November and December 2007 issues of Ø-Beat. Isn't technology wonderful? There wouldn't have been room in the print version because there are a lot of features, so it's a good thing we have a PDF version available.

Les KCØNC is still getting up to speed with his WayBack Machine column dits and bits about the history of the Pikes Peak Radio Amateur Association, but he serves up a couple of small items of interest this month.

In the meantime, it's time to renew (or sign up for) your membership. You may either tear out the form in the printed newsletter or download a copy from the PPRAA web site. I have to put it on my desk calendar at the beginning of the year, along with birthdays, anniversaries and writing deadlines or I'd forget.

If you'd like to make the newsletter more interesting or see your stories and name in print, send me your articles, news, awards and tidbits at zerobeat@ppraa.org and I'll find room – that is, unless you really would rather see what people in other, more active amateur radio club are doing. It's all up to you.

73 as always…
Jackie Cornwell ACØCA

Tubs of Tubes
Dan Romanchik KB6NU

The other day I got a call from a guy whose website I'm working on. He says he's calling from the Ann Arbor Reuse Center and that they have two tubs full of vacuum tubes there. He asked, "Do you know anyone who might want them"?

"How much are they asking for them"? I ask.

"Ten cents a piece."

"How many are there"?

"I'd guess about two hundred."

"Well, tell them I'll give him 20 bucks for all of them."

He tells them that I'll give them $20 for the lot. I hear some mumbling. He comes back on the line and says they're negotiating. After a minute or two, he says, "OK. You got them. How do I get to your house"?

I gave him directions and in about 15 minutes he pulls up to my house, gets out, opens the hatch and pulls out two plastic tubs and a cardboard box with vacuum tubes in them. I can tell he was way off in his estimate. There must be at least 400 tubes in all.

That's a lot of tubes

There's nothing really exotic—most of them seem to have been taken out of old TV sets—but I did find a couple of 6J6s. These are the tubes used for the single-tube transmitter I have been thinking about building (see wv7g.home.mindpring.com/jones_6j6.htmll for more info). In one of the tubs, there was even a socket for the 6J6.

There are also a bunch of 6KS7s. According to the RCA tube manual, these tubes were often used as RF or IF amplifiers. That sounds like the beginning of a receiver project, doesn't it? In fact, the receiver section of the ParaSet contained 6SK7s, a "spy radio" used during WWII. See mines.uidaho.edu/~glowbugs/paraset.htm

And, of course, there are even rectifiers to make a power supply. Now, all I have to find are some cheap transformers. Anyone know a good source?

When he's not wondering what he's going to do with more than 400 vacuum tubes, KB6NU works CW and PSK on the HF bands and blogs about ham radio at www.kb6nu.com. You can reach him by e-mail at cwgeek@kb6nu.com.

And there's more where those came from…

PPRAA PRESIDENT'S CORNER

*H*appy New Year, PPRAA,

It was good to see everyone who turned out for the PPRAA Christmas Party. For those of you who missed it, you missed a great social event and a chance at lots of great door prizes. Thanks again to Susan, KCØSYA, for organizing it for us. Also, congratulations to Les Borst, KCØNC, and Jim Harris, ABØUK, who were awarded this year's Lifetime Achievement awards. They were selected from a slate of deserving nominees so we will have a good pool for consideration of this award in the future.

The start of the New Year provides an opportunity to reflect back on the past year for Ham radio. In 2007, we saw a lot of activity. The FCC dropped the Morse code requirement for general and extra class licenses at the beginning of the year with a corresponding increase in license upgrades that resulted in a lot more folks with HF privileges. At the end of the year, Ham radio shone in its support of local emergencies. Both Oregon and Hawaii had weather related crises that relied upon Ham operators to provide emergency communication. Oregon Governor Ted Kulongoski stated, "I'm going to tell you who the heroes were from the very beginning of this . . . the ham radio operators. These people just came in and actually provided a tremendous communication link to us." So 2007 ended with a testimony to the relevancy and importance of Amateur Radio in this age of cell phones and the Internet.

In late December, there was evidence that Solar Cycle 23 may finally have ended and the next solar cycle has begun. On December 11th, a small knot of magnetism popped up on the sun's eastern edge. This doesn't seem like much, but new solar cycles always begin with a high latitude, reversed polarity sunspot, according to the Marshall Space Flight Center. "Reversed polarity" means that a sunspot has the opposite magnetic polarity compared to sunspots from the previous solar cycle. "High latitude" refers to the location of the sunspot on the surface of the sun. Old cycle sunspots occur near the sun's equator. New cycle spots occur higher, around 25 or 30 degrees latitude. The region that appeared on December 11th fits both criteria, except that it isn't a sunspot. It's just a bright region of magnetic fields. If these fields coalesce into a sunspot, then Solar Cycle 24 will have officially begun.

Planning continues on the MegaFest, Field Day and the COQP. While the way ahead for these events is coming together, we still need volunteers to step forward and ensure that the required actions are completed on time. Contact a club officer or board member to find out what you can do to make these events the best ever.

Don't forget that the January meeting is at the East Library on North Union Blvd.

Wishing you all the best in this New Year
73,

Douglas Nielsen, N7LEM
PPRAA President

NONPROFIT STATUS

The PPRAA is a federal 501(c)(3) nonprofit organization, and welcomes all contributions. Your contributions or donations may be tax-deductible.
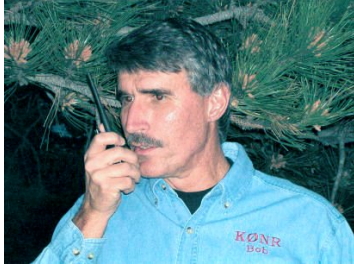
Ham Radio Fun
Colorado 2008

Now that the New Year festivities are behind me, it is time to plan my ham radio fun for 2008. 2008. I generally skip the New Year's resolutions (as they last about a month) and anticipate the key events for the coming year. Of course, ham radio events are the very first ones to list (I mean, after my wife's birthday and our anniversary . . . just for the record and in case she's reading this.) I thought I would pass along some events for you to consider. To me Colorado means mountains, which means getting outdoors, and that means Height Above Average Terrain and VHF, so my list has that bias. Take a look and maybe you'll try something new this year.

ARRL January VHF Sweepstakes - Jan 19-20
This is a great opportunity to try out SSB on 6M and higher. FM activity is OK, too.
Rules at www.arrl.org/contests/rules/2008/jan-vhf-ss.html

PPRAA Megafest - June 14
A great swapfest, centrally located along the Front Range at Lewis-Palmer High School in Monument.

ARRL June VHF QSO Party - June 14-16
This is The Big One for VHF operating. Find a high spot to operate portable or just get on the air from home. Maybe do a rover operation (mobile from different grids).
Rules at http://www.arrl.org/contests/

ARRL Field Day - June 28-29
You have to work Field Day . . . whether it is with the PPRAA, with another club or on your own.
Rules at arrl.org/contests/announcements/fd/

CQ Worldwide VHF Contest - July 19-20
This is a 6-Meter and 2-Meter only contest. The date isn't published yet, but will probably be around July 19-20. This is a great time to get on VHF and focus on just two bands.

Colorado 14er Event - August 10
Amateur Radio operators from around Colorado will be operating from the summits of 14,000-foot mountains. Find a high spot and see how many you can work. Most activity is on 2M FM but other bands are used, too. Info at www.14er.org

Colorado QSO Party (COQP) - Sept 20-21
Nothing says "Colorado" more than the COQP. This is a great opportunity to get on the air and have some fun. The COQP offers something for everyone: single operator, multi-operator, mobile, HF, VHF, county hunting, etc. and it's sponsored by the PPRAA: www.ppraa.org/coqp/

If you haven't work VHF or would like a few tips, check out www.k0nr.com/rwitte/vhf_contest.html

Bob Witte, KØNR
bob@k0nr.com

AMATEUR RADIO LICENSE EXAMINATIONS

The PPRAA/VE team holds testing sessions at 9 AM at the Colorado Technical University, 4435 North Chestnut (just west of I-25 and just south of Garden of the Gods Rd).

Exam fee: $14.00 for Elements 2, 3, and/or 4, payable to ARRL/VEC.
No same-day retakes of same element. Walk-ins allowed; pre-registration not necessary.

BRING: Photo ID, original and copy of valid ham license and/or valid CSCE, and FRN for licensed hams.

Contact:
Jackie Cornwell ACØCA at 719-632-8254 or email
Online: ppraa.org or arrl.org.

Mark your calendars:

Feb. 9, Apr. 12, Jun. 14, Aug. 9,

Oct. 11, Dec. 13

January 2008 Contest Schedule

- **ARRL RTTY Roundup**
  1800Z, Jan 5 to 2400Z, Jan 6
- **EUCW 160m Contest**
  2000Z, Jan 5 to 0700Z, Jan 6
- **ARS Spartan Sprint**
  0200Z-0400Z, Jan 8
- **Hunting Lions in the Air Contest**
  0000Z, Jan 12 to 2400Z, Jan 13
- **Midwinter Contest, CW**
  1400Z-2000Z, Jan 12
- **North American QSO Party, CW**
  1800Z, Jan 12 to 0600Z, Jan 13
- **NRAU-Baltic Contest, CW**
  0530Z-0730Z, Jan 13
- **Midwinter Contest, Phone**
  0800Z-1400Z, Jan 13
- **NRAU-Baltic Contest, SSB**
  0800Z-1000Z, Jan 13
- **DARC 10-Meter Contest**
  0900Z-1059Z, Jan 13
- **LZ Open Contest**
  0400Z-1200Z, Jan 19
- **Hungarian DX Contest**
  1200Z, Jan 19 to 1200Z, Jan 20
- **North American QSO Party, SSB**
  1800Z, Jan 19 to 0600Z, Jan 20
- **Run for the Bacon QRP Contest**
  0200Z-0400Z, Jan 21
- **CQ 160-Meter Contest, CW**
  0000Z, Jan 26 to 2359Z, Jan 27
- **REF Contest, CW**
  0600Z, Jan 26 to 1800Z, Jan 27
- **SARL Youth for Amateur Radio**
  0700Z-1100Z, Jan 26
- **BARTG RTTY Sprint**
  1200Z, Jan 26 to 1200Z, Jan 27
- **UBA DX Contest, SSB**
  1300Z, Jan 26 to 1300Z, Jan 27

ARRL VHF contest is also the 19 and 20th which is the same weekend as NAQP-SSB :(

PPRAA BOARD MEETING MINUTES
Dec. 17, 2007
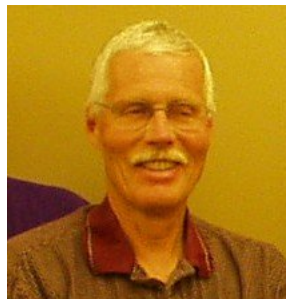
Attendees: Mike WV7T, Doug N7LEM, Dennis NØABC, Ken KDØAGV, Joe NØVKR, Bill KDØJU, and John KCØJFH.

President Doug Nielsen N7LEM called the meeting to order at 7:02 PM at the Stetson Hills Police Substation. Minutes were approved as printed.

Reports

Treasurer's Report – Dennis NØABC reported that we have at total of $10,920.24 in our three accounts as of Dec 17, 2007.

Membership Committee – no report.

Programs – Ken KDØAGV
- Jan – Homebrew Show and Tell - Bring your homemade project to show off.
- Feb – Antenna building project – type tentatively is a twin-lead J-pole.
- Mar – Digital Modes
- Apr – Dxing
- May – QRP plus MegaFest preparation
- Jun – Field Day info, preparation, and coordination
- Jul – RTTY
- Unscheduled: test instruments

Unfinished Business:
- ❖ **Volunteer Recognition**, Level 2 Awards
- ❖ What items should we use? Stainless steel travel mugs are preferred.
- ❖ **Phone Notification/Announcements:** Les needs to provide Joe NØEKR with our members' phone numbers to be used for meeting reminders.

❖**Asset Storage:** Mike still needs to move the club equipment at his home to another location. Timing is not critical, but this will remain an open item.

❖ **Membership Benefits:** Mike is working on a new member package. Ken suggested that we assign a mentor to new members. He also suggested we delay access to Zero Beat for one month for nonmembers on the website. Board members are requested to make an effort to talk with new or prospective members at the club meetings. Another suggestion is to give a table discount for club members at our hamfest. Ad specialty items with the club logo, etc., were also mentioned. New jackets were also discussed. Possible sources are callsigndepot.com and callsignwear.com.

❖ **Membership:** Suggestion was made to increase youth activities by setting up a scholarship award program for young hams. Also Joe suggested that we give new hams a call after they get their license.

❖ **Special Events Stations:** Possibilities: NORAD tracks Santa, PBS fund raising events with club members answering phones.

New Business

✓**Club Picnic:** Proposed date is 16 August 2008. Tentative location is Dirty Woman Park in Monument.

✓**Website Calendar:** Doug has improved the calendar to allow viewing of categories of events (e.g., meetings, contests, etc.).

Around The Table

➢ **Mike WV7T:** Mike and Jim ABØUK have volunteered to head up Field Day if no other volunteers speak up. Mike would like to turn over the club owned books to the club librarian (Ken). What should we do with the Hammy Award? Should we do a quarterly dinner? How about some family-oriented summer activities/trips?

➢ **Ken:** He is looking for old CQ magazines for the library.

➢ **Doug:** Could we have some type of field trip-type programs, such as a visit to a TV station or the weather bureau?

The meeting was adjourned at 8:38 PM.

Next PPRAA Board meeting: 7PM, Monday, January 14, 2007, at the Stetson Hills Police Substation.

Submitted by:
John Wishart KCØJFH
PPRAA Secretary
18 November 2007

WAY BACK MACHINE

1938

  "A thrill for themselves and a service for the community " - that tells the story of the activities of radio amateurs, of whom there are a dozen or more in Colorado springs with transmitting and receiving sets used in contacting hundreds of other amateurs in all parts of the United States and in several foreign countries.

  Among local enthusiasts are Carl and George Drumeller, members of Pikes Peak Amateur Radio Association.

1954 January

  The regular meeting of the El Paso Radio Club was held at the Naval Reserve Armory.
  It was noted that the Club visited KRDO TV. On invitation of Joe Rehear, the meeting was adjourned and the members went to visit KRDO.

Les Borst KCØNC

SOLAR UPDATE
George McCray AGØS

Big NEWS? Maybe I should say Good News and Bad News. Many solar physicist's who study solar activity were at odds in early December with the emergence of a weak zone of reversed magnetism at 24 degrees North Latitude.

A high latitude area with reversed polarity appeared over the eastern limb of the sun on December 11th. (Figure 1) This area of reversed magnetism may be the indicator of the beginning of a new solar cycle. In this
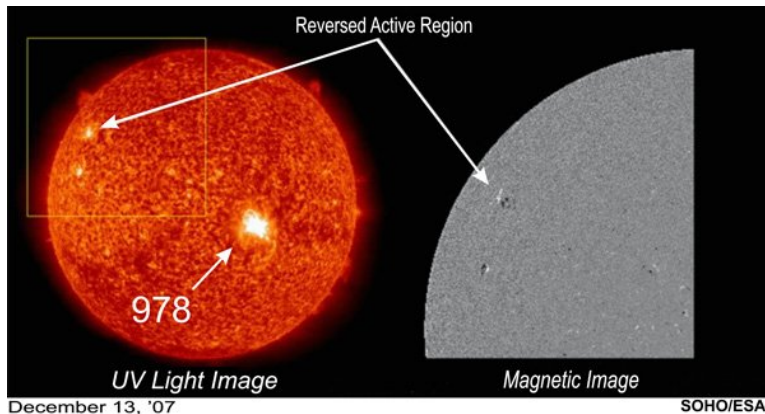
Figure 1

case, however, it didn't last long and faded nearly as quickly as it emerged. Nevertheless,, some are already predicting the beginning of cycle 24. "New solar cycles always begin with a high-latitude, reversed polarity sunspot," explains Dr. Hathaway of "NASA/National Space Science & Technology Center". "Reversed polarity " means a sunspot with opposite magnetic polarity compared to sunspots from the previous solar cycle. "High-latitude" refers to the sun's grid of latitude and longitude. Old cycle spots congregate near the sun's equator. New cycle spots appear higher, around 25 or 30 degrees north latitude. The region that appeared on Dec. 11th fits both these criteria. It is high latitude (24 degrees N) and magnetically reversed. Just one problem: *There is no sunspot*. So far, the region is just a bright knot of magnetic fields. If, however, these fields coalesce into a dark sunspot, scientists are ready to announce that Solar Cycle 24 has officially begun.

So the "Good News" is, there was an area of reversed magnetism at high latitude on the solar disk

but the "Bad News" is there was no associated sunspot. Are we about to see the beginning of Cycle 24? That is the proverbial $24,000- question. We'll just to wait and see.

The 45 Day Forecast indicates we should have Solar Flux around 85 from January 4th through the 11th and in the mid to high 70's until the first week in February.

Reprinted by permission of George McCray AGØS from the January 2008 issue of **Round Table**, *the Denver Radio Club's newsletter.*

BRAGGING RIGHTS
Mike Anderson WV7T

Mike Anderson WV7T earned three certificates for working the "5 Sullivan Brothers" special event station, both as WV7T and with his special event station KØUSN, on Veteran's Day 2007. Also included is the certificate honoring Greg "Pappy" Boyington of the Marine Corps Black Sheep Squadron in WW II who was immortalized in the TV series, *Black Sheep*, from 1976-1978.

What certificates have you been awarded in the past few months you'd like to share? There's always room in Bragging Rights to take your bows Rights and more space on the web.
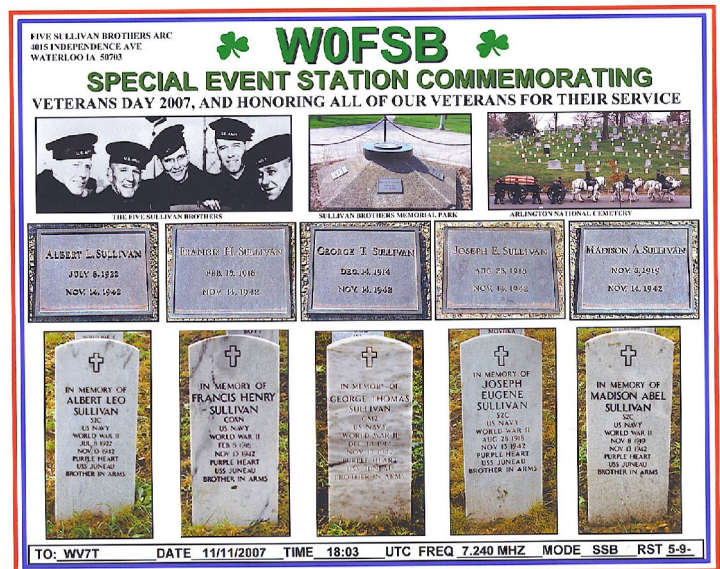
The five Sullivan brothers enlisted in the Navy following the attack on Pearl Harbor where one of their friends was killed. They all were assigned to the USS Juneau, which was attacked and sunk during WW II with the loss of not only the Sullivan Brothers, but several pairs of brothers, an action that prompted the United States government to save one brother after D-Day and became the movie, *Saving Private Ryan*, based on a true story of a private in the 101st Airborne Division.

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 kd0ju@amsat.org

PPRAA Christmas Party 2007
Photo Album

There's nothing like a party to liven things up.

Doug N7LEM and Jim ABØUK
Lifetime Achievement award winner

Mike Anderson WV7T
PPRAA Multi/Single Operator Award for 2007

Looks like Dan ACØCC is ready for more.
(lower right hand corner)

Merry Christmas to all and to all a good feast.

DITS & BITS

Dr. Robert C Varnum (Bob), WAØWRL donated the following items to the club in memory of his father Walt Varnum, W2OH. Walt W2OH died several years ago and his call sign was reassigned.

➤ Collins KWM-2 Transceiver
➤ Collins Power Supply Type 516F2
➤ Drake RF Watt Meter model W-4
➤ Heathkit Q Multiplier model QF-1
➤ Johnson Viking Match Box

Bob has lived in Colorado Springs for years but has not been active in amateur radio. He maintains his ticket out of respect for his father. Walt was a very active ham in New Jersey and used Morse code at 40-50 WPM. He kept in contact with Bob by radio and bought Bob some Collins equipment that he thinks was a KWM-2. The radio has sat idle since his father's death. Pictures of the equipment Bob donated are available on the Ø-Beat online. President Doug Nielsen N7LEM will have the equipment checked out and provide Bob with info about the first QSO made.

Some of the equipment donated by Bob WAØ0WRL

Creating Great Websites with Joomla!
Part 3

This is the final installment in a 3-part series of articles on developing professional websites with the free and powerful Joomla! Content Management System (CMS).

CMS systems generally allow the development of complex sites without the need to master all the nits of programming navigation bars, adding pictures, making buttons work, linking between pages, connecting to databases, allowing users to upload and download files, keeping a blog, etc.

Part 1 (November 2007, PPRAA Ø-Beat) walked readers through the installation process for Joomla! The December 2007, PPRAA Ø-Beat carried part 2, which was focused on editing and adding content, inserting pictures into articles, working with menus/navigation and polling users. Part 2 also introduced the Joomla! Administrator. Both of these PPRAA Ø-Beat back-issues are available for download and a working example of a simple Joomla! website can be found at K0SRW.com.

We'll finish up the article series with some quick examples of adding **components** to your site. Joomla! defines a **component** as a separable feature of Joomla!'s baseline functionality. The **component** term also refers to extensions that let your site move beyond Joomla!'s baseline capabilities.

Once we talk about a few example components, and a handy addition that demonstrates making a minor addition to one of Joomla's PHP files, we'll wrap things up with a peek at **Google Analytics**. Google Analytics is a free and very comprehensive website usage monitoring tool you'll use to analyze the thousands of hits your awesome new website receives!

Finding New Extensions

As of December 17, 2007, there were over 2,500 Joomla! extensions available at Extensions. If you Google for "Joomla extensions" you'll find a number of other sites that distribute Joomla! extensions too, but Extensions.joomla.org is always my first stop. Here, you'll find a huge array of Joomla! extensions in the following general categories:

- Admin Tools
- Banner Ads & Affiliates
- Calendars
- Communication
- Content & News
- Core Enhancements

- Documentation
- e-Commerce
- Extension Specific Plugin
- Forms
- Gallery & Multimedia
- Intranet & Groupware

- Languages
- Miscellaneous
- Search & Indexing
- Tools
- Vertical Markets
- WYSIWYG Editors

Fortunately, there's a convenient **Search** capability right near the top of the extensions site home page so you can look for what you're trying to find without trying to guess the category where the extension was filed.
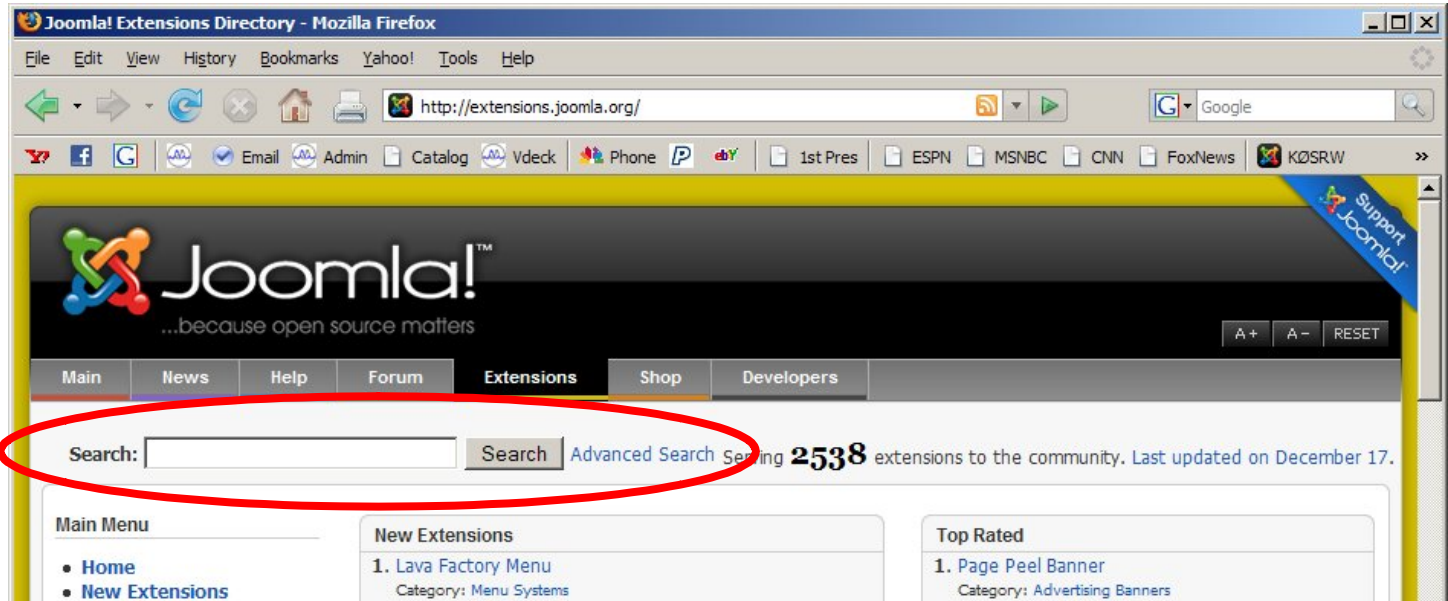
Adding a Time Zone Clock to Your Website

As a quick example, let's add a simple, yet powerful time zone clock to your website. Once the extension is installed, it will look something like the following, where different colors, represent different types of events (all at your discretion, of course):

Your first step will be to navigate to the Joomla! extensions site. In the **Search** control at the top, type the word **clock**. The one we want is called **Time Zone Clock** and today at least, it appears at the top of the list. But, you might need to scroll the other **fifty** clock modules that are available in order to find it.

Once you find the Time Zone Clock, you'll see something like this:
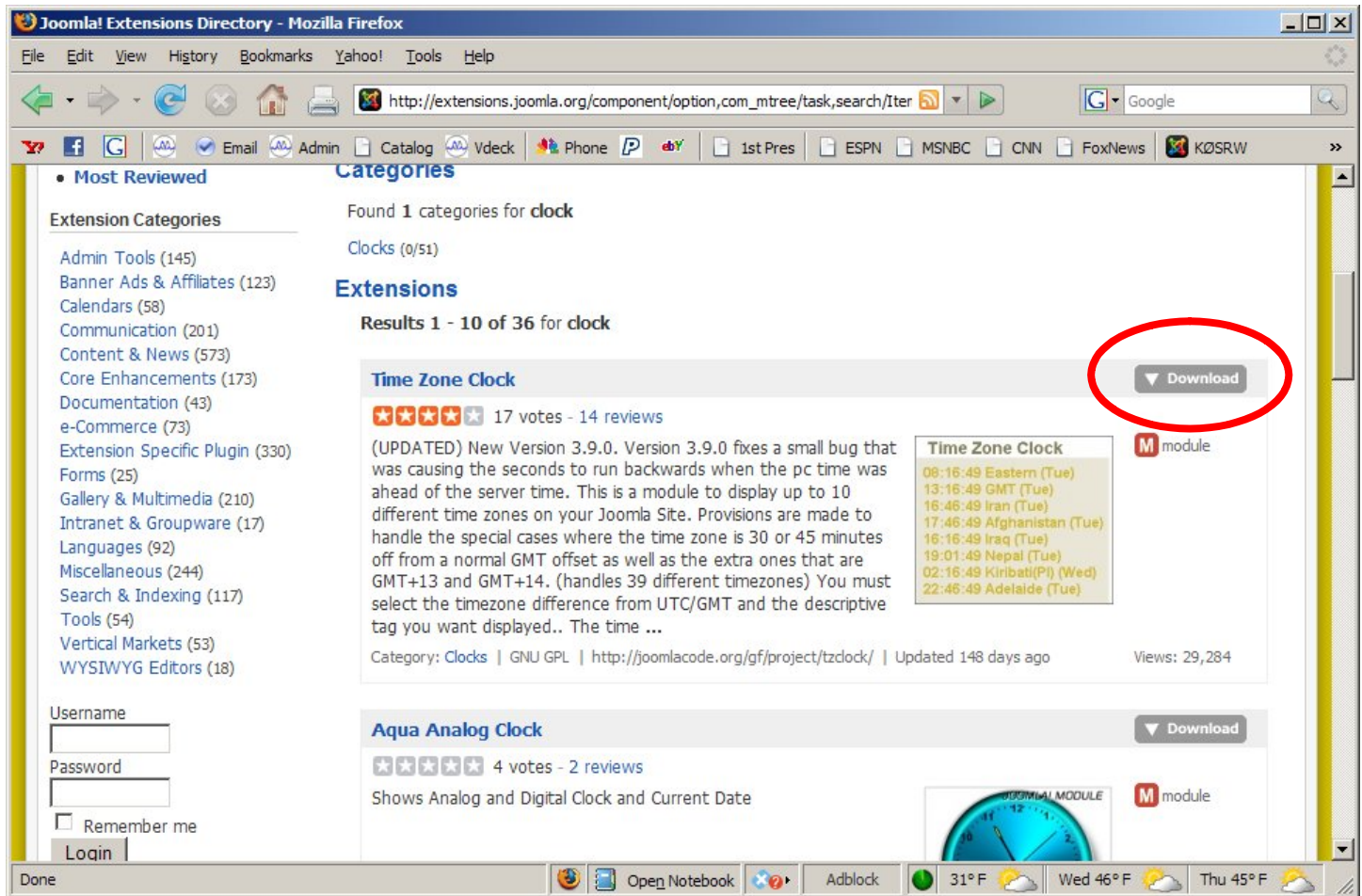
Click the **Download** button, and you'll be taken to the download site for the developer of the Time Zone Clock extension:
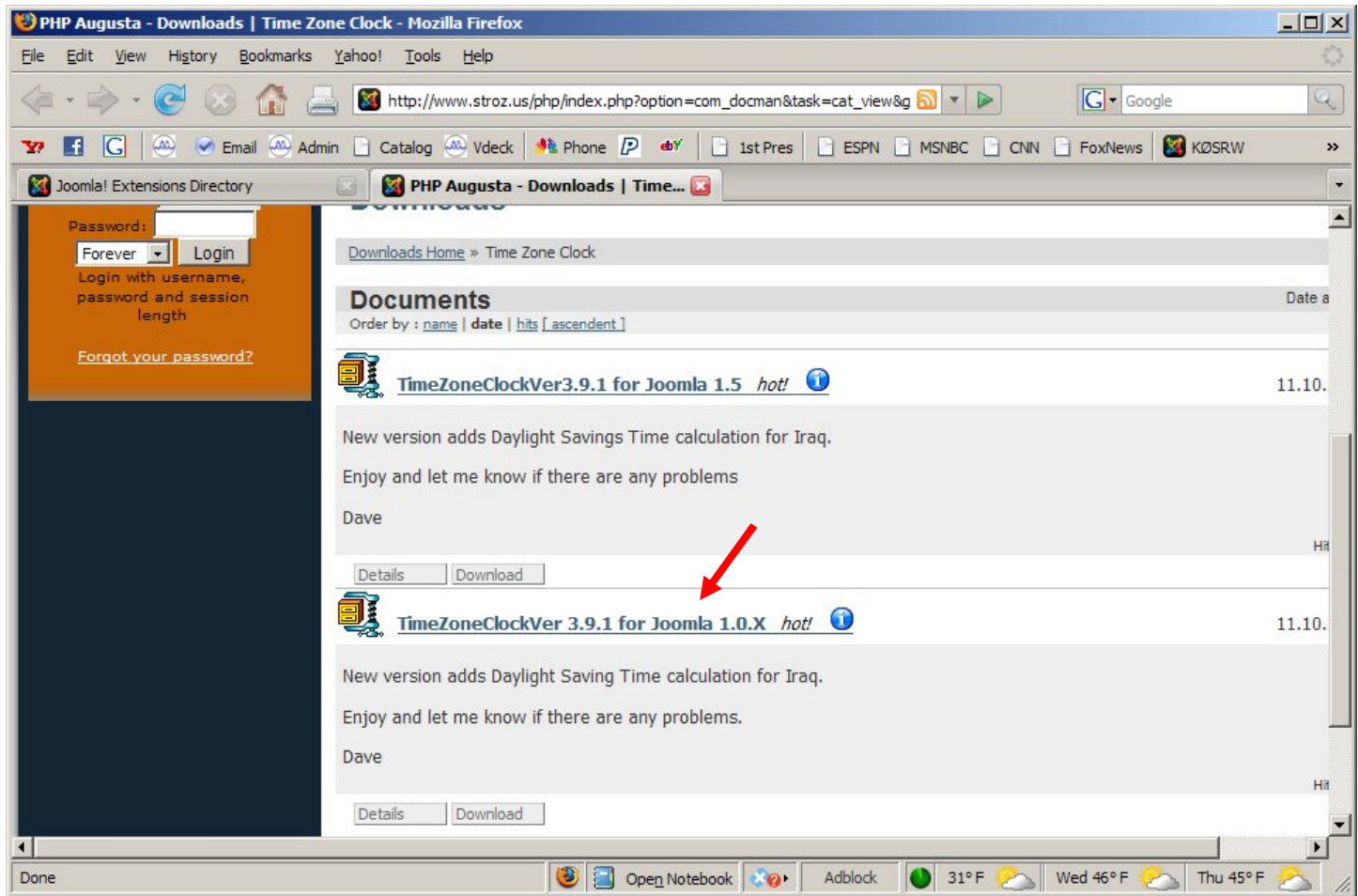
We've been working with Joomla! 1.0.13, so click the link shown by the red arrow above. Depending on which browser you're using (I'm using Mozilla Firefox here), you'll see a dialog like the following, where you'll want to save the ZIP file to disk.
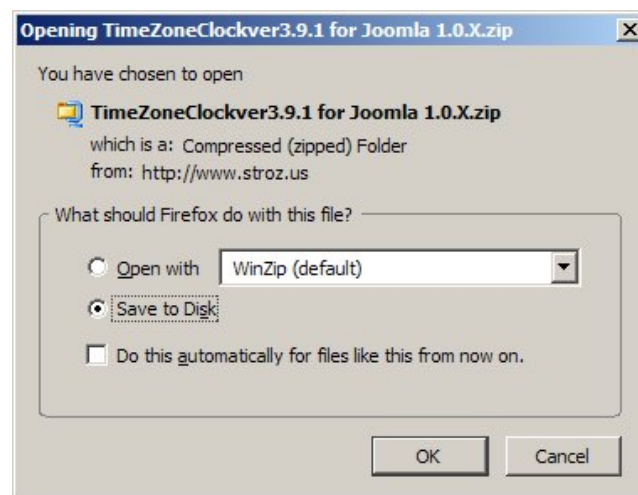
Now, navigate to your Joomla! Administrator panel which can be accessed by pointing your browser to http://www.yoursitename.com/administrator. Log on as described in last month's article.

Once in the Joomla! Administrator, select **Installers | Modules** from the menu bar as shown below:
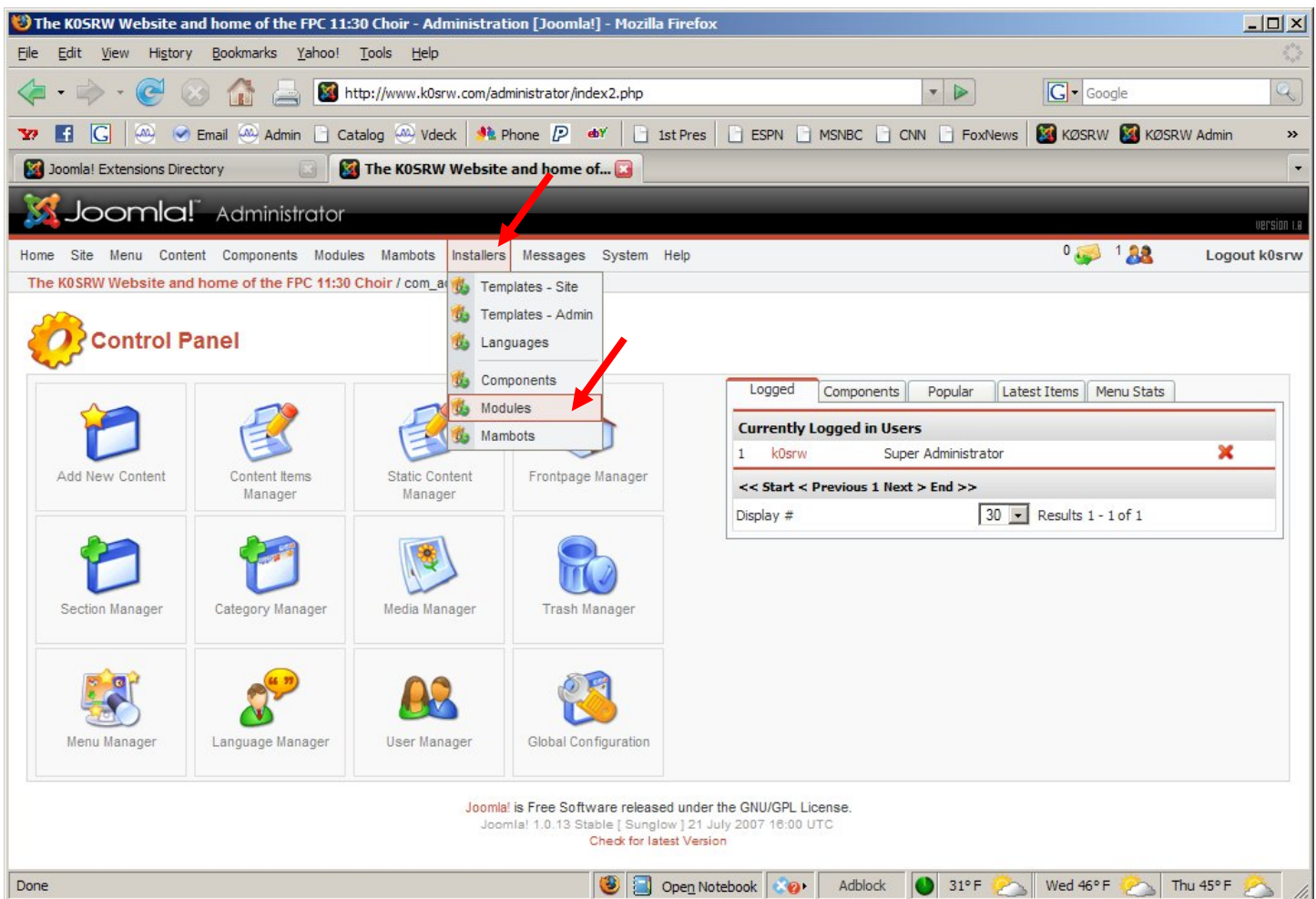
The top portion, entitled **Install New Modules** is where we'll be working, but if you roll down farther on the display, you can see a list of all modules that are installed on your site already. Unless you've already

installed some additional modules on your own, the ones you'll see in this list are those that are part of the Joomla! baseline installation.
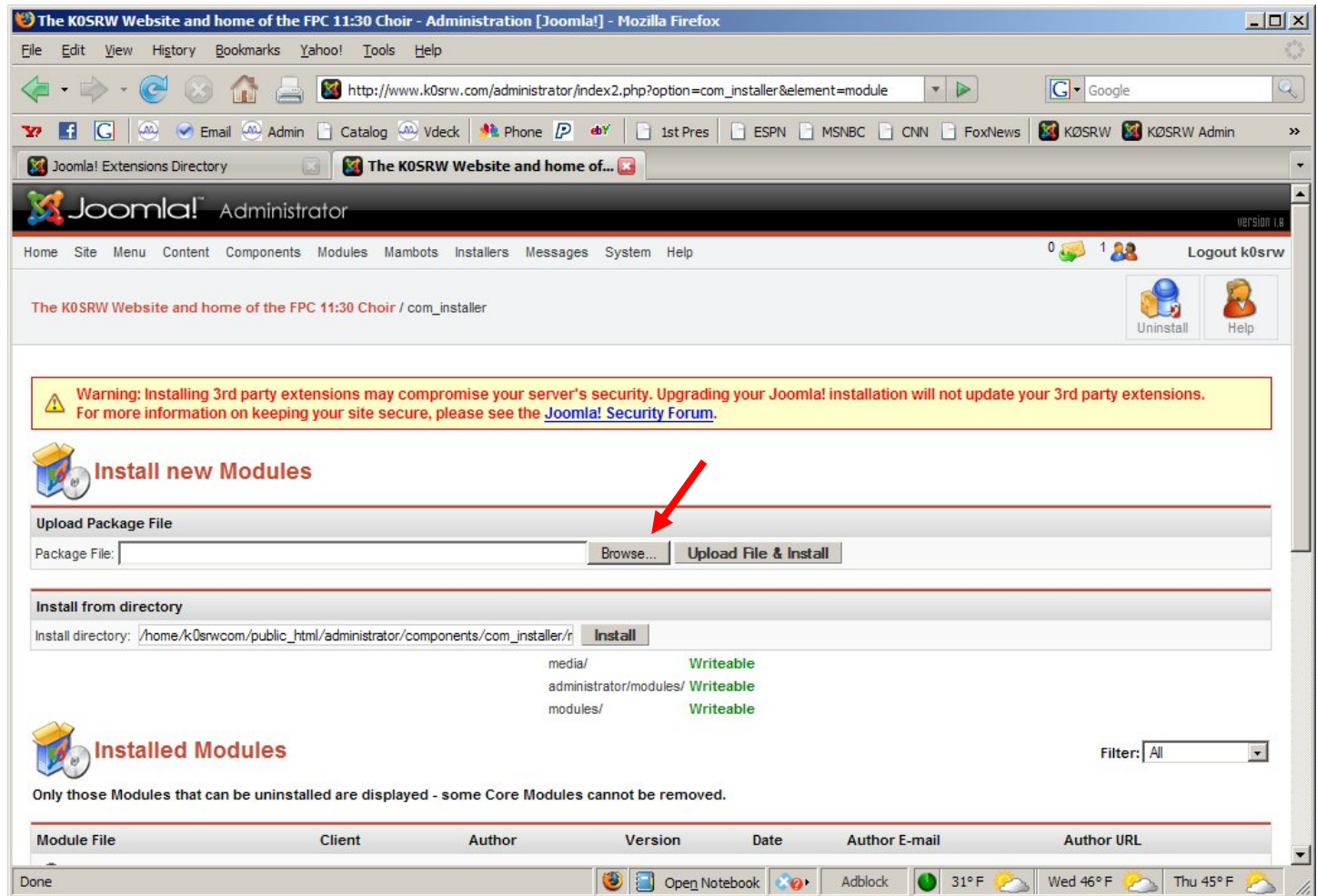
This installation process just couldn't be much simpler! Click the **Browse** button and find the ZIP file you just downloaded from the Time Zone Clock developer's web site.
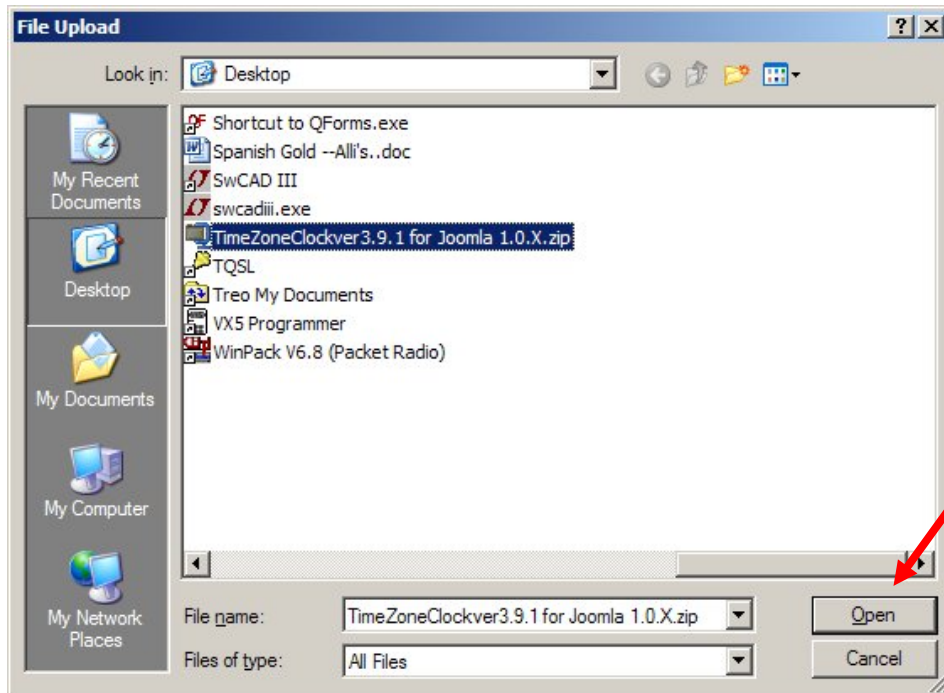
Once you've found the file, click on it, then click the **Open** button on the **File Upload** dialog. Having done this, you'll be back at the Module Installer page, but you'll note that the module package file is now filled in.
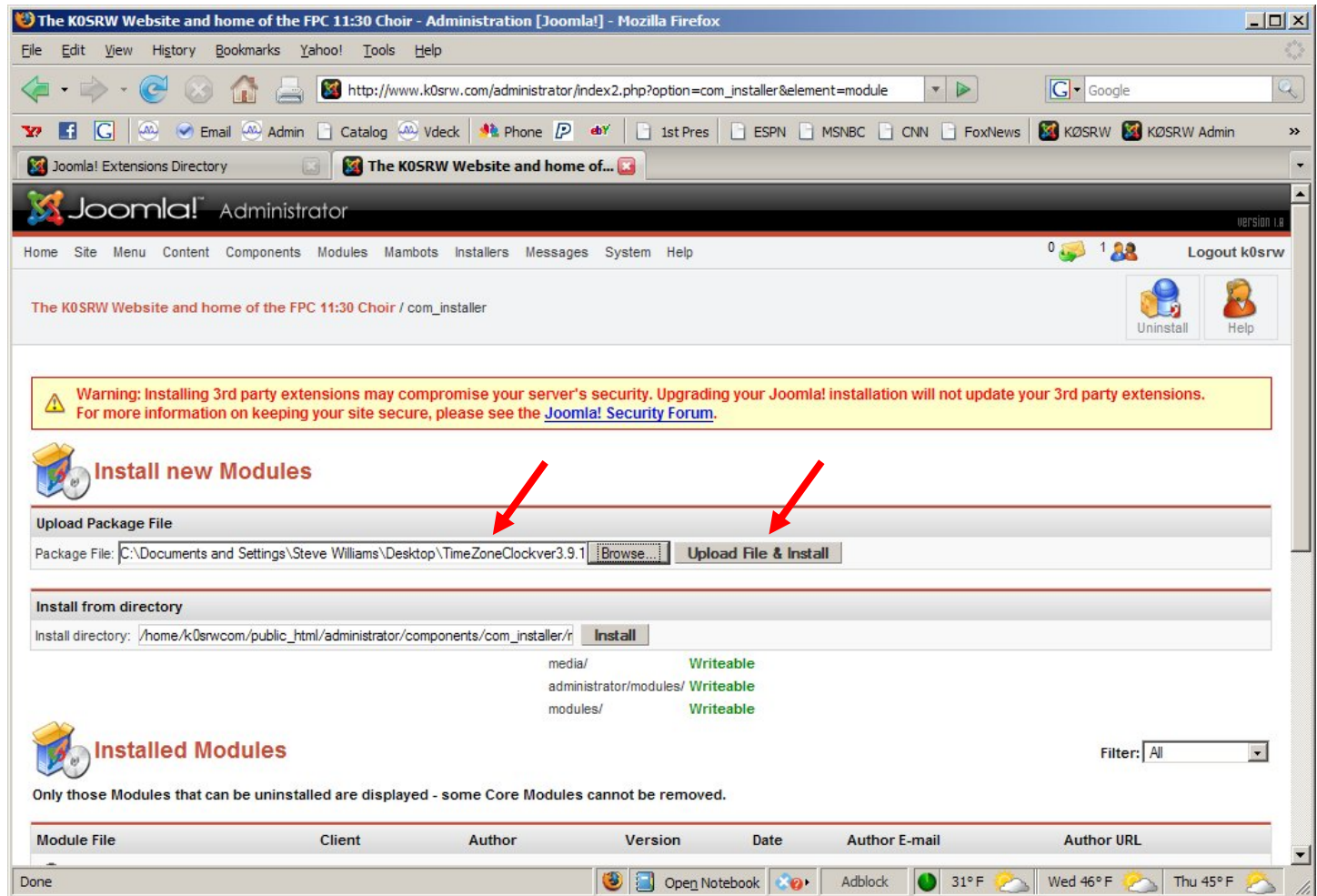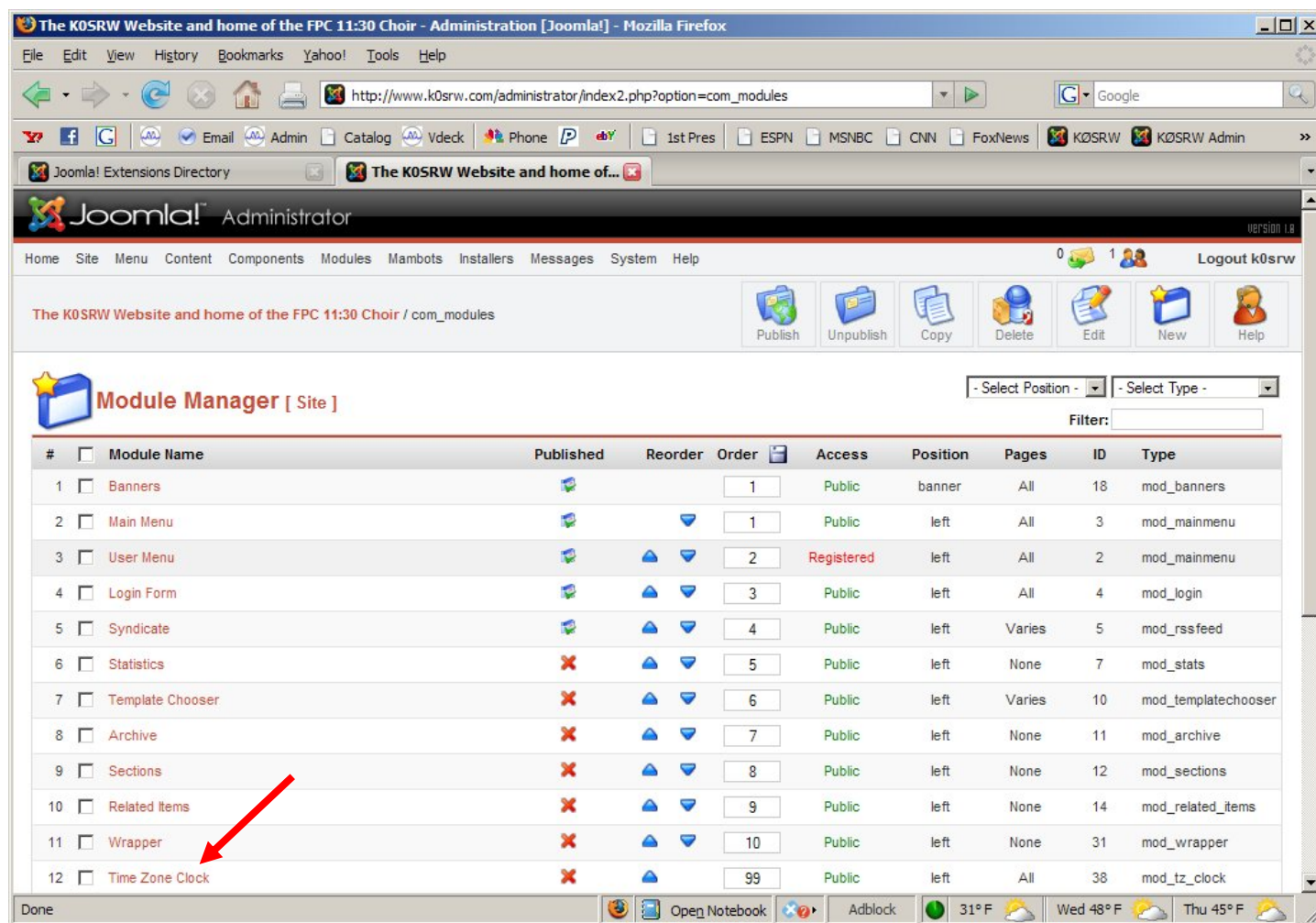
Click the **Upload File & Install** button, and within a few seconds the module will be installed, as confirmed by the following display:
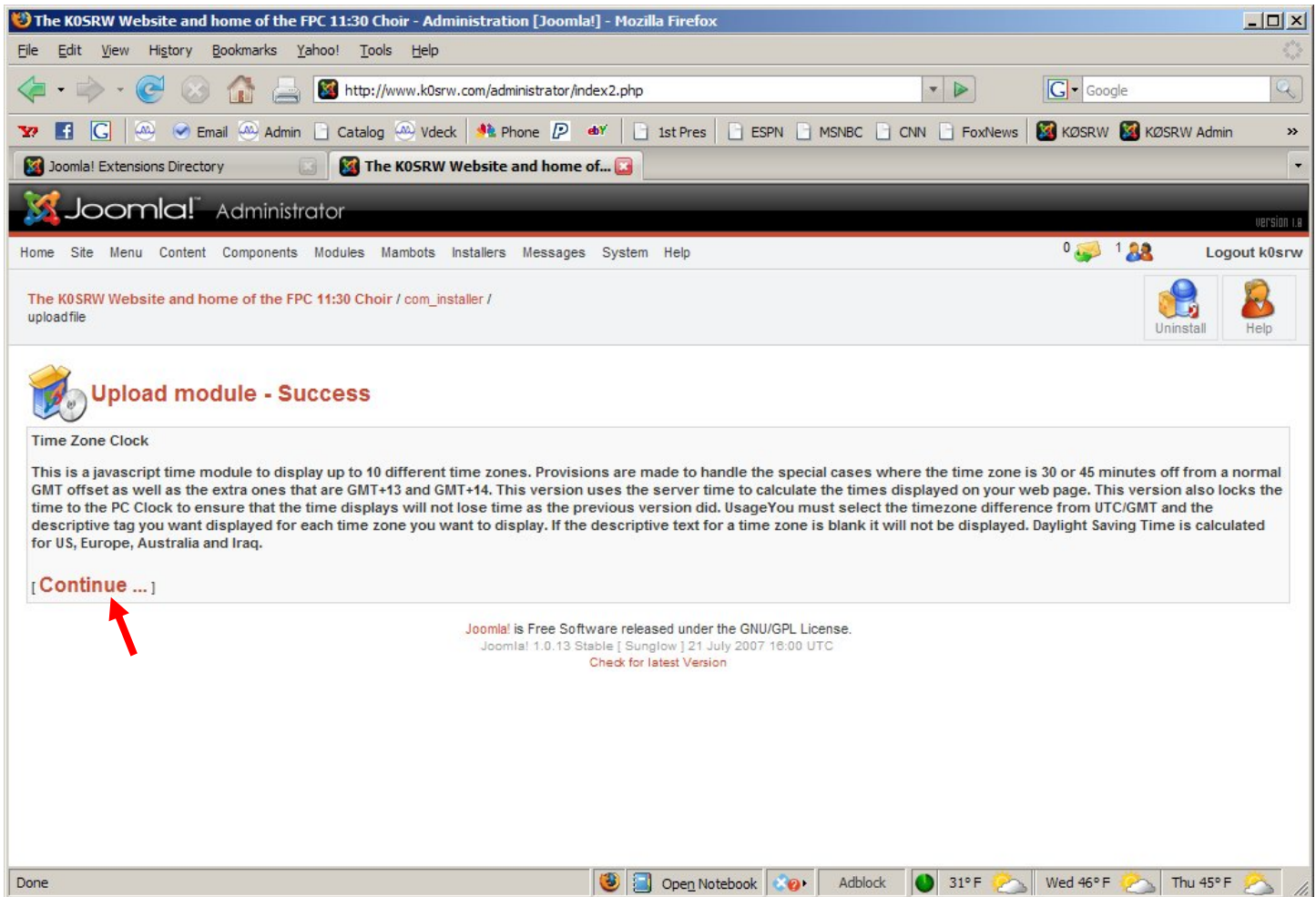
Read the developer's notes provided, then click the **Continue…** link. You'll be returned to the Module Installer screen, where you can select **Modules | Site Modules…** to adjust the behavior of the newly installed Time Zone Clock module.
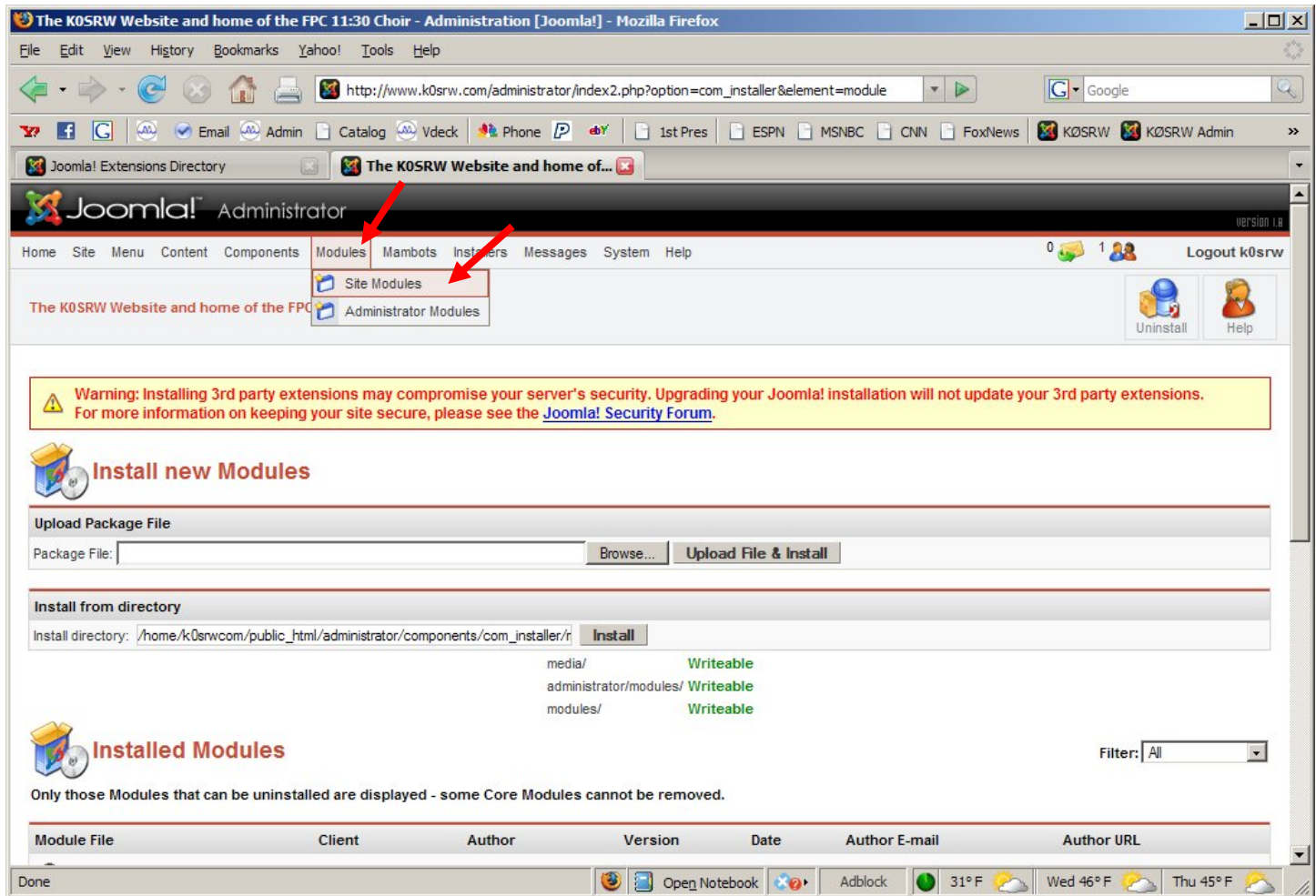
After choosing **Modules | Site Modules** you'll see a display like this one, where you'll be able to find your new Time Zone Clock module listed.

Click on the Time Zone Clock name (though it doesn't appear as a link, it actually is one), and you'll be taken to the control panel for the Time Zone Clock module. Don't change any of the settings just yet, but scroll around and take a quick look at all the options you have!

Scroll back to the top of the Time Zone Clock module control panel, and click the **Published** radio button as is shown here:
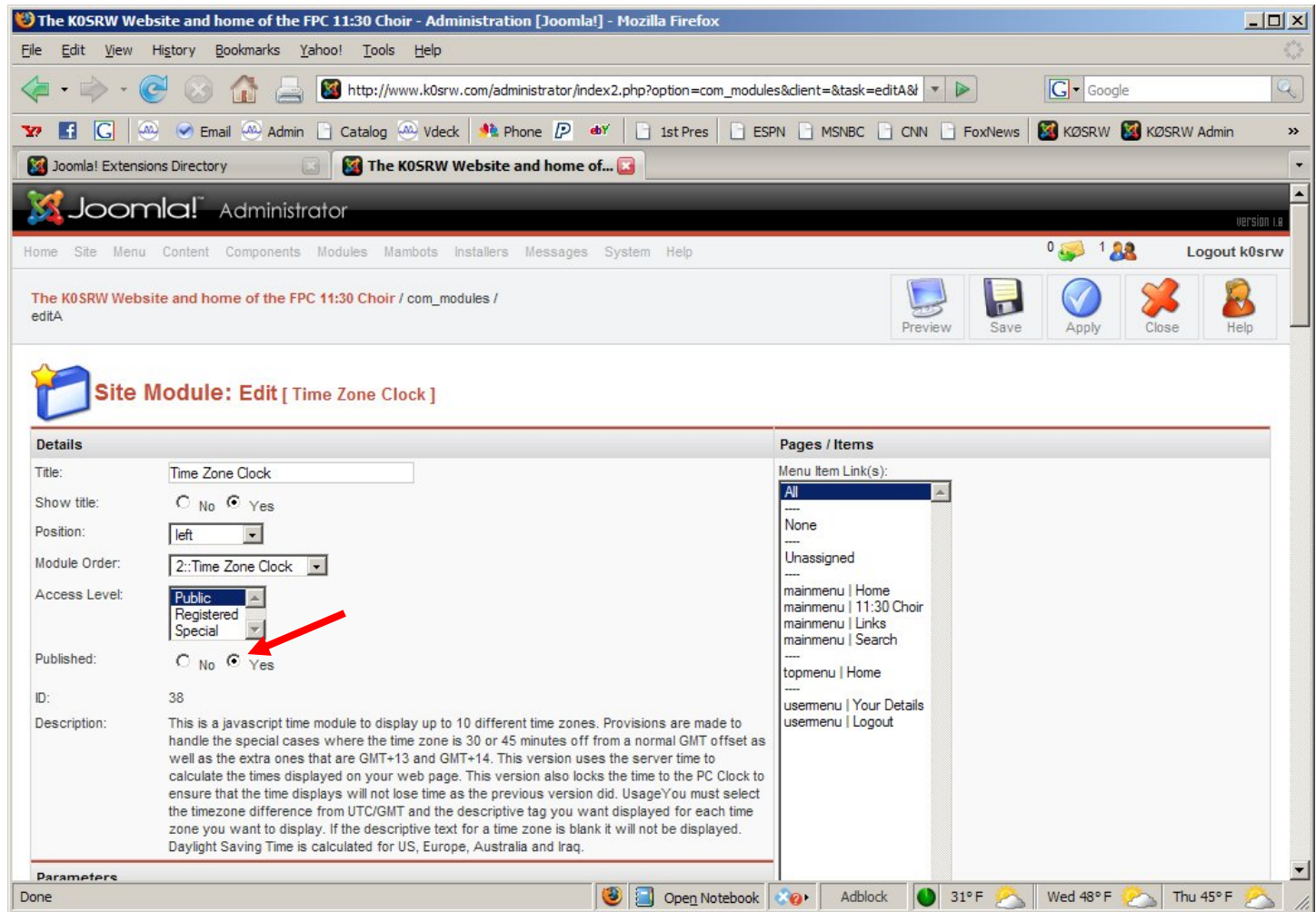
Next, scroll down a little so that you can the **Font Size Selection** and **Font Weight for text** controls. Match the following settings:
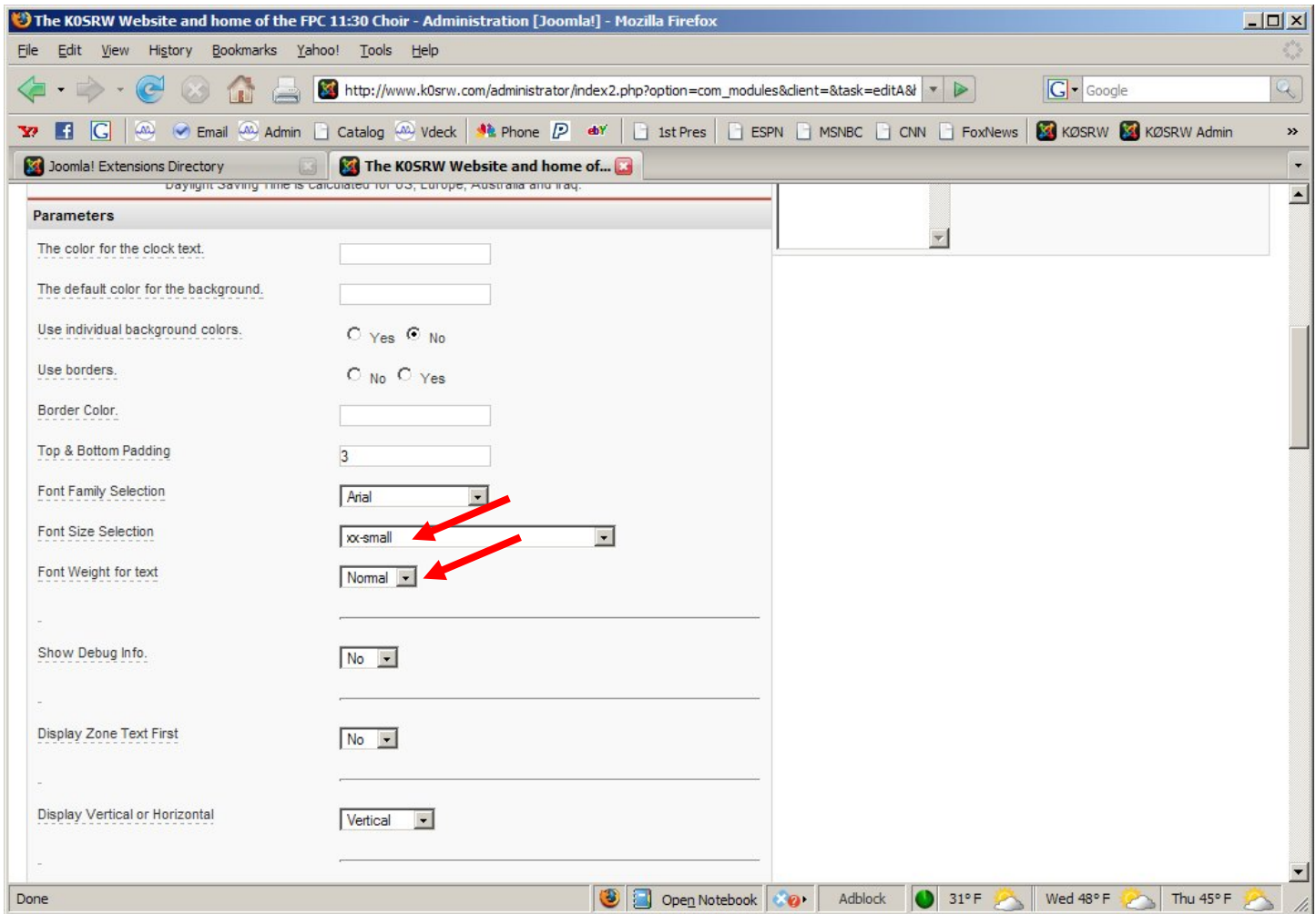
Scroll down a bit farther, and match these settings for time zone 1 and time zone 2.
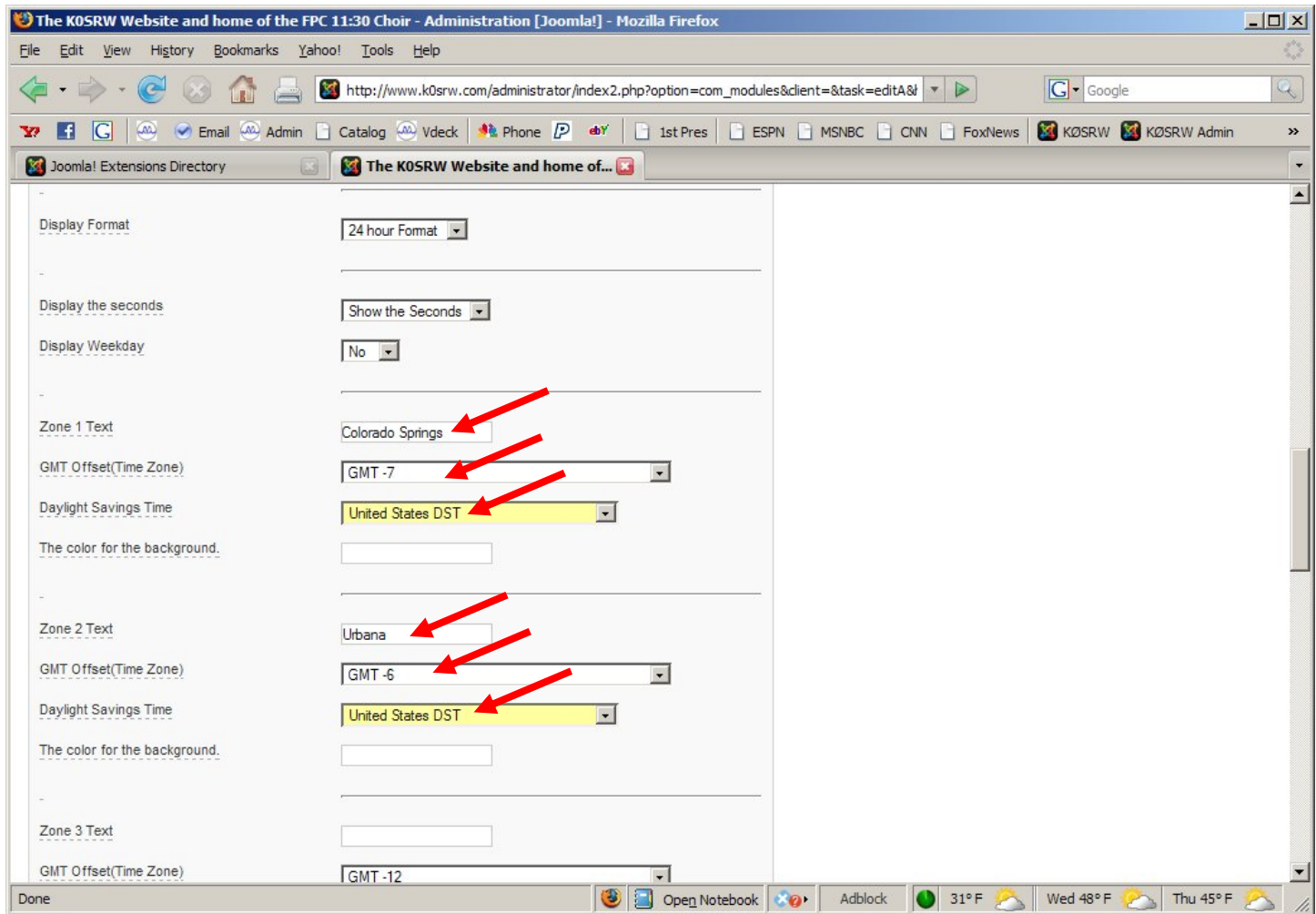
Finally, scroll back to the top of the control panel and click the **Save** button:
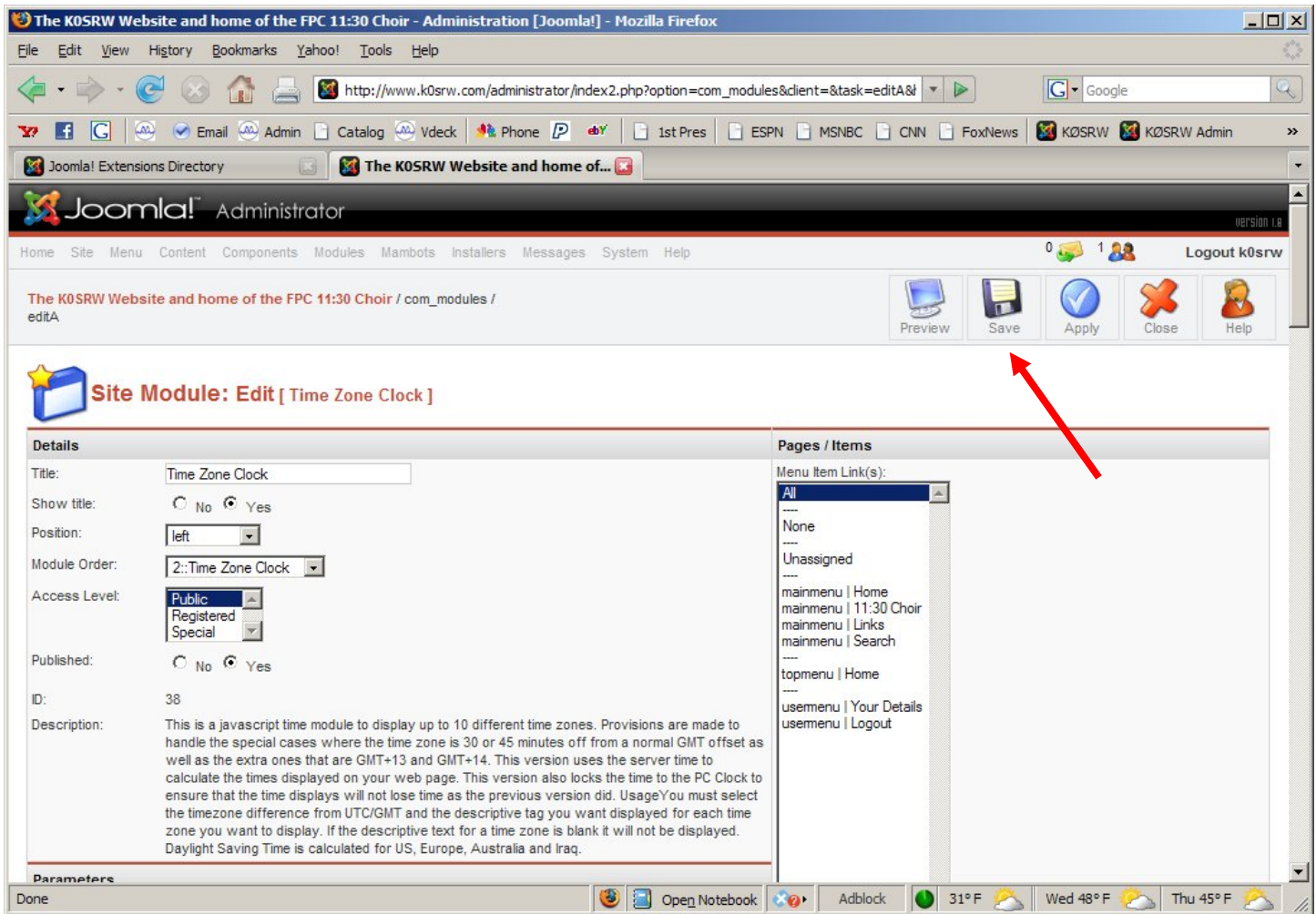
Now, fire up your website, and you should see your brand new Time Zone Clock! Of course, as you saw, there are many, many more configuration options, so you can make it appear just as you would like it!
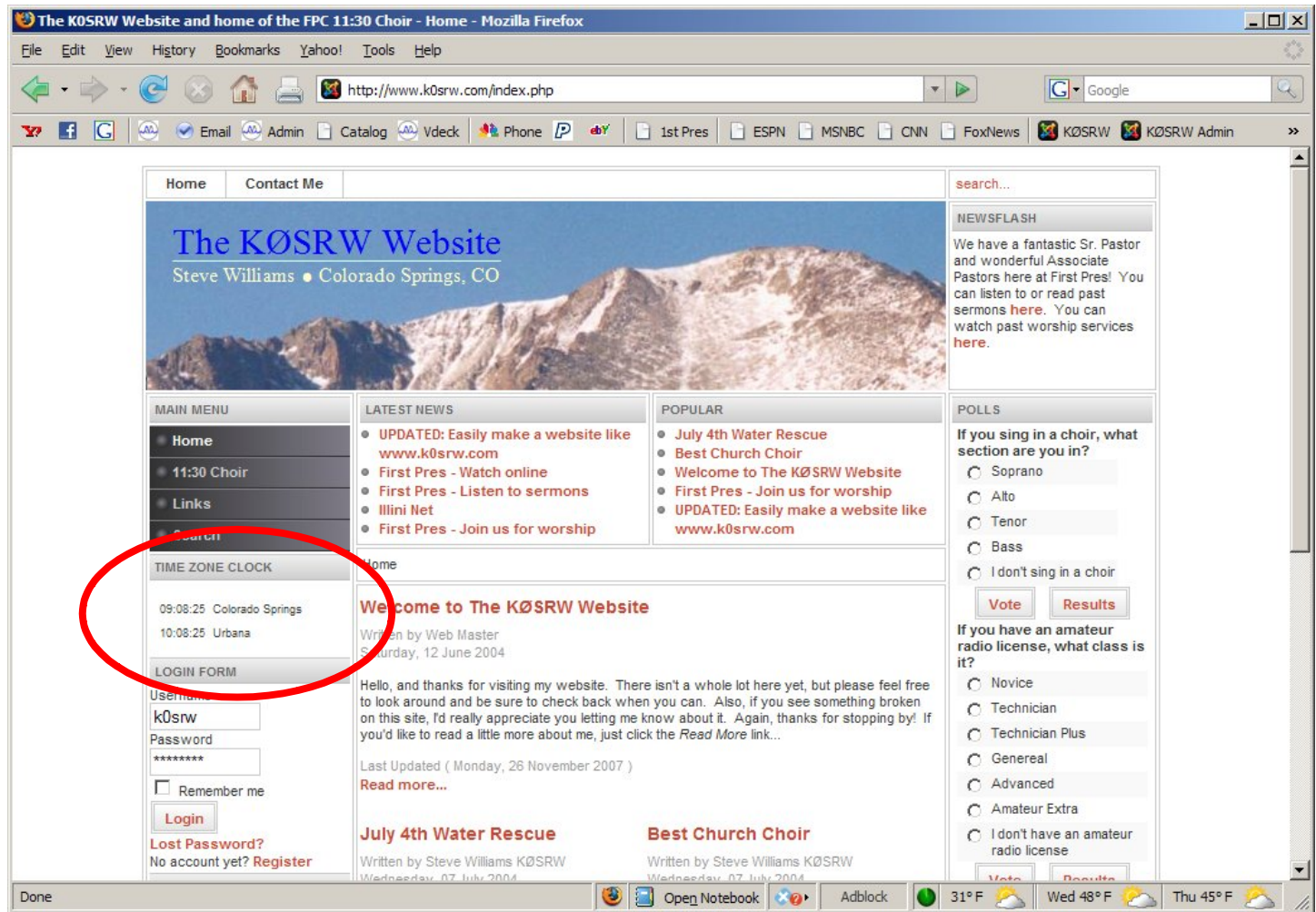
You don't even have to keep Urbana on your clock, but I like to since I grew up there (I went to the University of Illinois) and my Mom still lives there. The University of Illinois is home of course to the famed Symphonic Band and Marching Illini, both of which I played trumpet in. I graduated from the U of I's terrific Electrical Engineering department in 1981. The Illini, by the way, are very uncharacteristically headed to the Rose Bowl this year!

I digress…

That's one way to add new Joomla! extensions, and I think you'll agree that it was pretty easy!

Adding non-Joomla! Items to Your Website

Occasionally, you may discover a capability that you'd like to have on your website, but that isn't implemented as a normal Joomla! extension. This won't happen often, but if it does, know that you can add anything to your Joomla! website that you see on any other website.

These kids of additions will normally require at least some modifications or additions to Joomla!'s source files. Some will be complex, and others will be easy.

You'll want to determine if the effort involved is worth the learning, integration and testing time required, and if your site's users (and you) will get enough out of having the new addition on your site. Here again, Google may be your best friend, since it is unlikely that you're attempting a Joomla! integration with this addition for the first time.

If you've looked at the venerable KØSRW Website (ok, *venerable* is a bit of an exaggeration), you've probably noticed the nice AccuWeather graphic near the bottom of the left side. This is actually a connection to AccuWeather's netWeather addition.
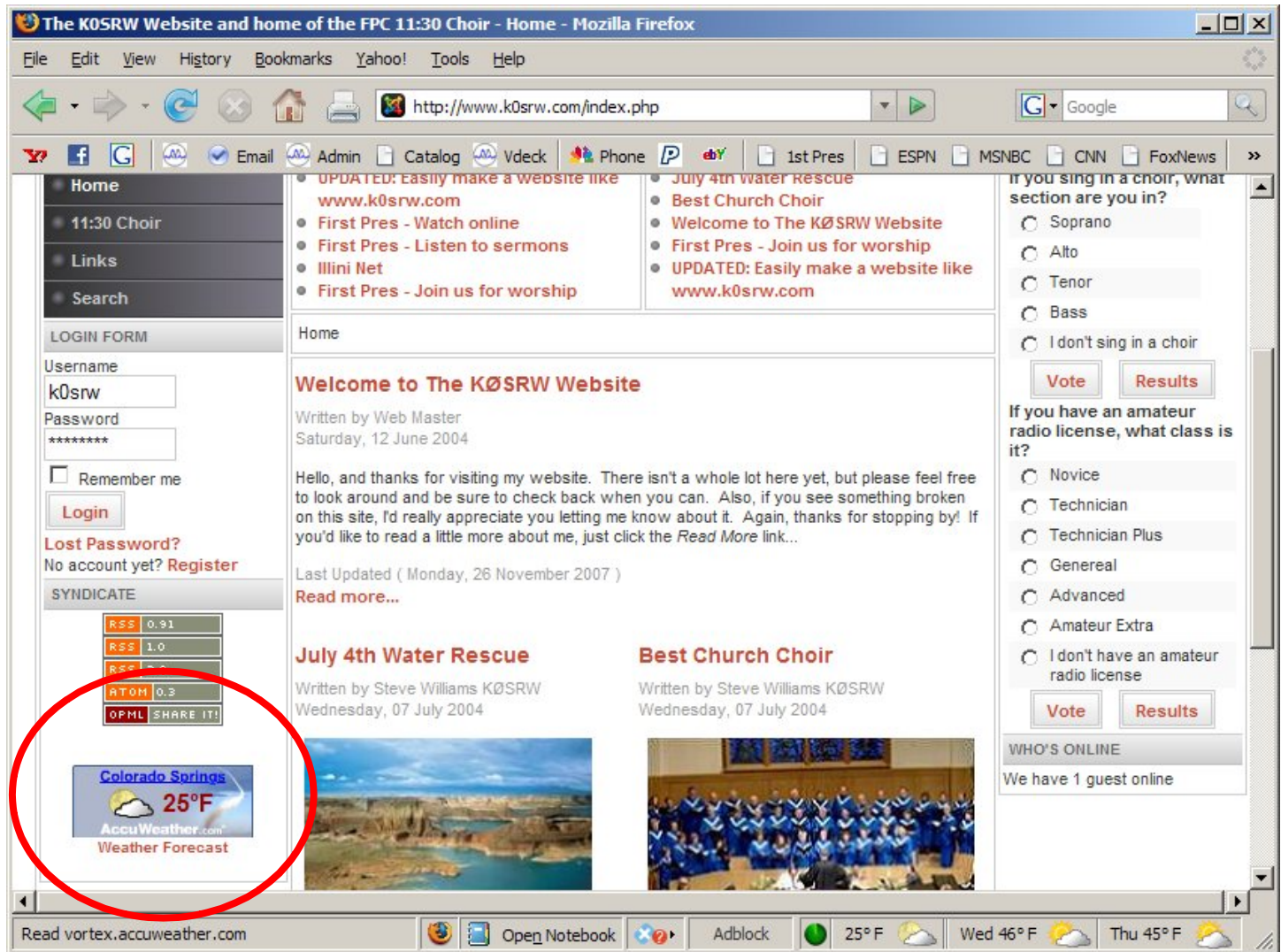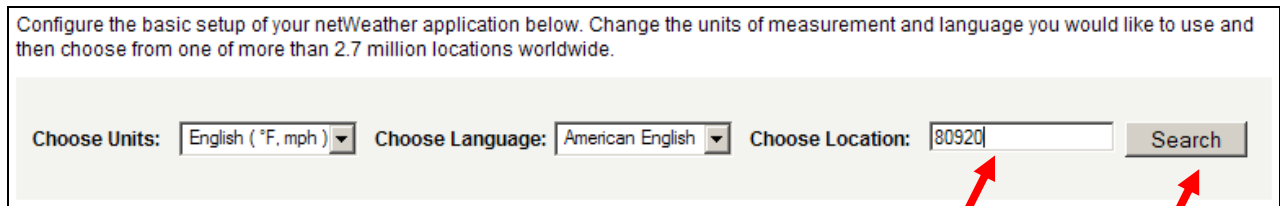
This is a nice little addition that lets you see the current weather situation at a particular zip code. The addition has several different visual appearances, and when it is clicked, complete forecast, temperature trends, warnings and radar materials are easily available. For ham radio sites, it's ideal.

The AccuWeather addition requires only a small snippet of code to be added into one of Joomla!'s PHP files. The code is supplied to you by the AccuWeather site, so you can just copy and paste. The only real trick is to discover where best to add this code!
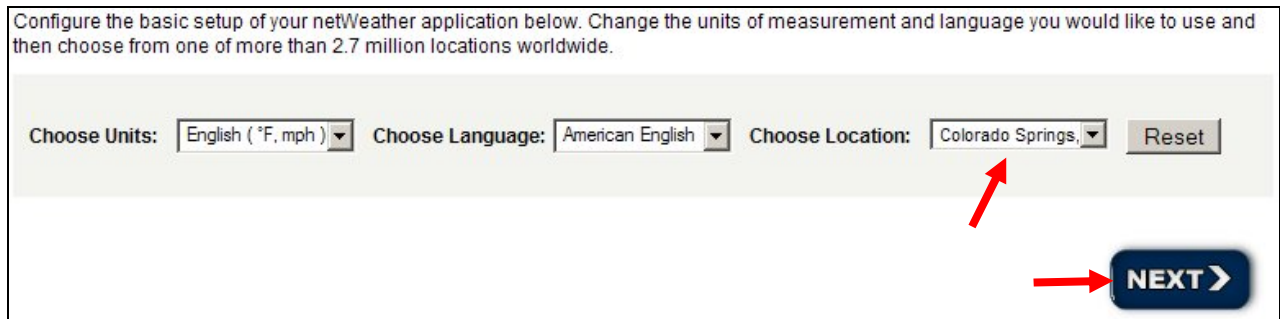
To get started, point your browser to http://netweather.accuweather.com. You'll wind up on a page that briefly describes netWeather's capabilities, with a large **GET MY NETWEATHER** button which you can click once you've looked over the introductory material.

You'll then see a page that asks for some configuration information about your netWeather link. This information is needed so that the AccuWeather site can "write" the proper code for you (which you'll later paste into one of the Joomla! PHP files). Many sites work like this, asking you for information, then generating a custom snippet of code for you based on your answers.

After you've entered the zip code, or the name of the location you're interested in, click the **Search** button, then verify that the displayed location is correct. Click the prominent **Next** button when you're ready to proceed.

Next, you can choose from a number of different display sizes, each containing different types of information. You can choose small displays (like I chose for K0SRW.com) or major nearly full-screen displays. You choose the general display size via the **Choose Size** control below. You can also select a background style via **Choose Category** and a background theme via **Choose Theme**. There's bound to be something there that you'll like.

When you've selected the display you'd like on your site, click the **Next** button. You'll need to agree to netWeather's terms and conditions on the next page, and if these are acceptable to you, just click the **I agree to these terms and conditions** checkbox.

Next, netWeather will present you with the code you need to add to your site:

Thank you for choosing netWeather. Below is the code you'll need for your site, blog, or MySpace page. New designs are added frequently, so check back often!

Web Page Code

```
<div style='width: 240px; height: 420px;
background-image: url(
http://vortex.accuweather.com/adcbin/netv
); background-repeat: no-repeat;
```

HIGHLIGHT THIS CODE

How to place on your site or blog

MySpace Code

```
<div style='width: 240px; height: 420px;
background-image: url(
http://vortex.accuweather.com/adcbin/netv
); background-repeat: no-repeat;
```

HIGHLIGHT THIS CODE

How to place on your MySpace page

Want to change the size, color, location or language of your netWeather? Return to the basic info or themes pages

Optional Contact Information

If you provide us with a valid email address, we will email you the above line of code so you will have it in case you need it again, should you modify your site or blog in any way. This will also provide us with a way to contact you with information on netWeather upgrades. **We respect your privacy and will not contact you for any other reason, and we will not sell your contact information.**

E-mail Address: k0srw@earthlink.net   Email Me

Filling in your email address at the bottom is certainly optional, but it is a good way for the AccuWeather folks to keep you posted with updates. In several years of netWeather use, I've received perhaps 2 emails from the system, so don't worry about all sorts of spam coming in.

On the left side of this display, netWeather's code for general web pages is displayed. To get this code into your "copy buffer", click the **HIGHLIGHT THIS CODE** button. It will look like this now:

Web Page Code

```
<div style='width: 240px; height: 420px;
background-image: url(
http://vortex.accuweather.com/adcbin/netv
); background-repeat: no-repeat;
```

HIGHLIGHT THIS CODE

Next, hover your mouse over part of the highlighted Web Page Code, then click the RIGHT mouse button. From the right mouse menu, click **Copy** with your left mouse button.
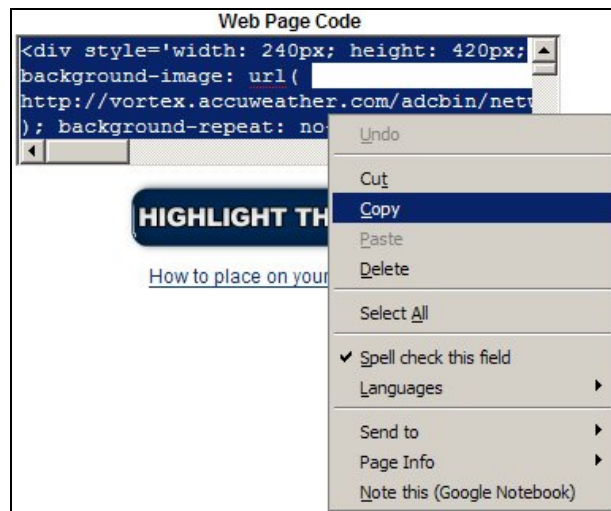
Now, netWeather's Web Page Code is in your "copy buffer" so you can paste it into the proper file! If you think you might accidentally use your copy buffer again before you are actually ready to paste the code, then leave netWeather's page open so you can recopy the code again later. Or, you can open Microsoft's Notepad or Wordpad applications and paste the code there for temporary safe keeping.

Next, the code needs to be inserted into the right place within the Joomla! file structure. This is the tricky part since normally you'd need to know a little bit about how to read PHP and HTML, and you'll need a sense for what file is used for what purpose.

I found a good place to insert this code, but you may feel free to place the code elsewhere if you like. The result of putting the code in the location I'll show you, is that the netWeather addition appears below the **Syndication** area in the left side navigation panel. You may want your netWeather to show up somewhere else, but start with this example, getting it working, then adjust to your preferences.

> *By the way, **syndication** is a great way for users to **subscribe** to your site, and receive instant notifications whenever you publish new items on your site. Via **news aggregators**, your subscribers don't even have to visit your site to get your latest updates! It is a very powerful way to get the word out! I won't take the time to talk about this excellent feature right here, but you could take a look in Wikipedia for a quick summary of what syndication is, and how it works. Start at http://en.wikipedia.org/wiki/Web_syndication.*

Using your FTP tool (CuteFTP, for example), connect to your site and locate the **modules/mod_rssfeed.php** file. At the very end of the file, paste in the netWeather code from the copy buffer. You should wind up with something like this:

```
mod_rssfeed.php - Notepad
File  Edit  Format  View  Help
                output_rssfeed( $link, 'rss10.gif', $rss10_image, 'RSS 1.0', 'RSS10' );
        }

        // rss20 link
        if ( $rss20 ) {
                $link = 'index.php?option=com_rss&amp;feed=RSS2.0&amp;no_html=1';
                output_rssfeed( $link, 'rss20.gif', $rss20_image, 'RSS 2.0', 'RSS20' );
        }

        // atom link
        if ( $atom03 ) {
                $link = 'index.php?option=com_rss&amp;feed=ATOM0.3&amp;no_html=1';
                output_rssfeed( $link, 'atom03.gif', $atom_image, 'ATOM 0.3', 'ATOM03' );
        }

        // opml link
        if ( $opml ) {
                $link = 'index.php?option=com_rss&amp;feed=OPML&amp;no_html=1';
                output_rssfeed( $link, 'opml.png', $opml_image, 'OPML', 'OPML'  );
        }
        ?>
</div>

<div style='width: 120px; height: 60px; background-image: url(
http://vortex.accuweather.com/adcbin/netweather_v2/backgrounds/tornado_120x60_bg.jpg );
background-repeat: no-repeat; background-color: #;' ><div style='height: 48px;' ><script
src='http://netweather.accuweather.com/adcbin/netweather_v2/netweatherV2.asp?partner=netwea
ther&tStyle=normal&logo=1&zipcode=80920&lang=eng&size=7&theme=&metric=0&target=_self'></scr
ipt></div><div style='text-align: center; font-family: arial, helvetica, verdana,
sans-serif; font-size: 10px; line-height: 12px; color: ;' ><a style='color: #'
href='http://www.accuweather.com/us/CO/COLORADO
SPRINGS/80920/city-weather-forecast.asp?partner=accuweather&traveler=0' >weather
Forecast</a></div></div>
```
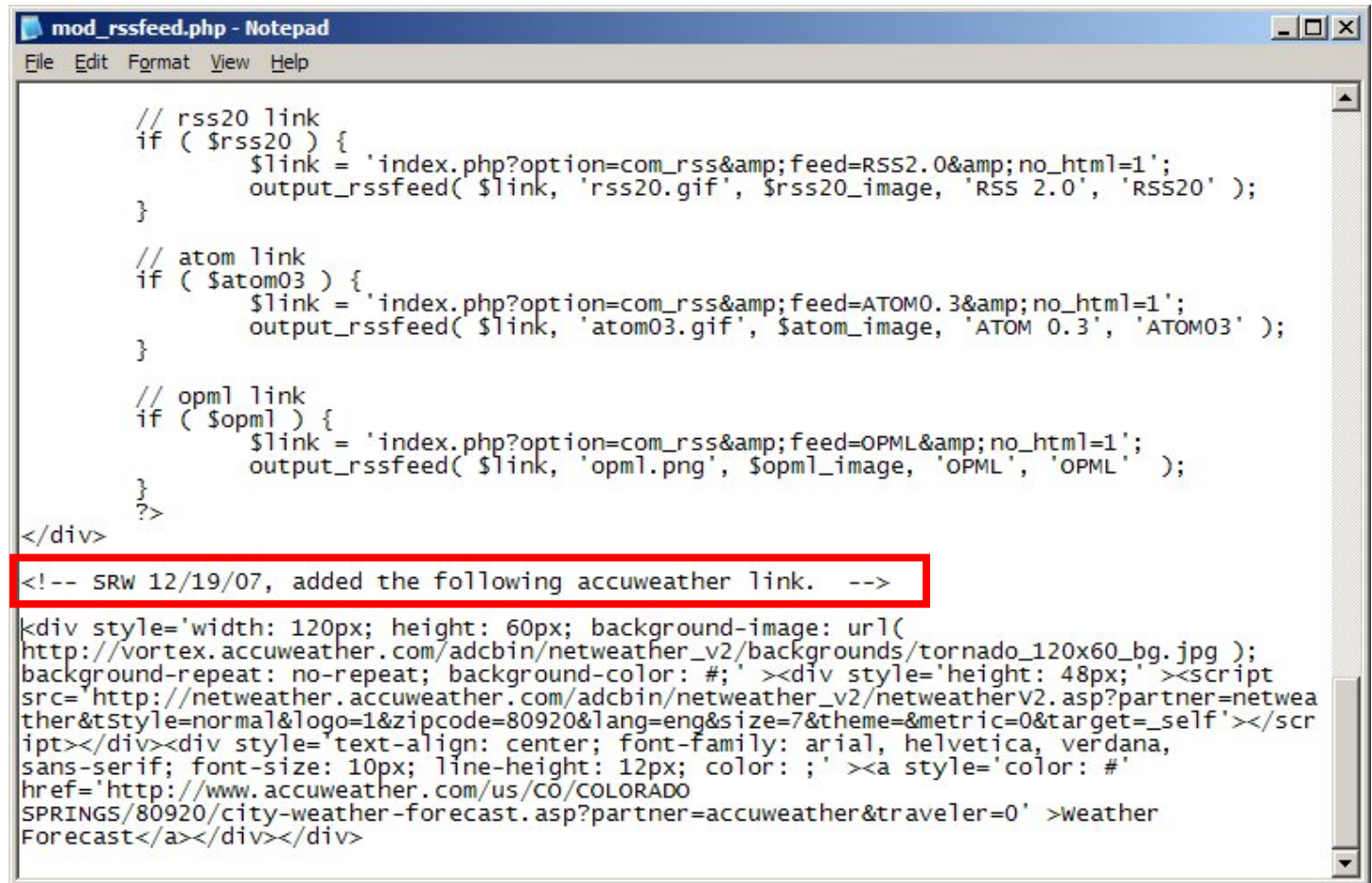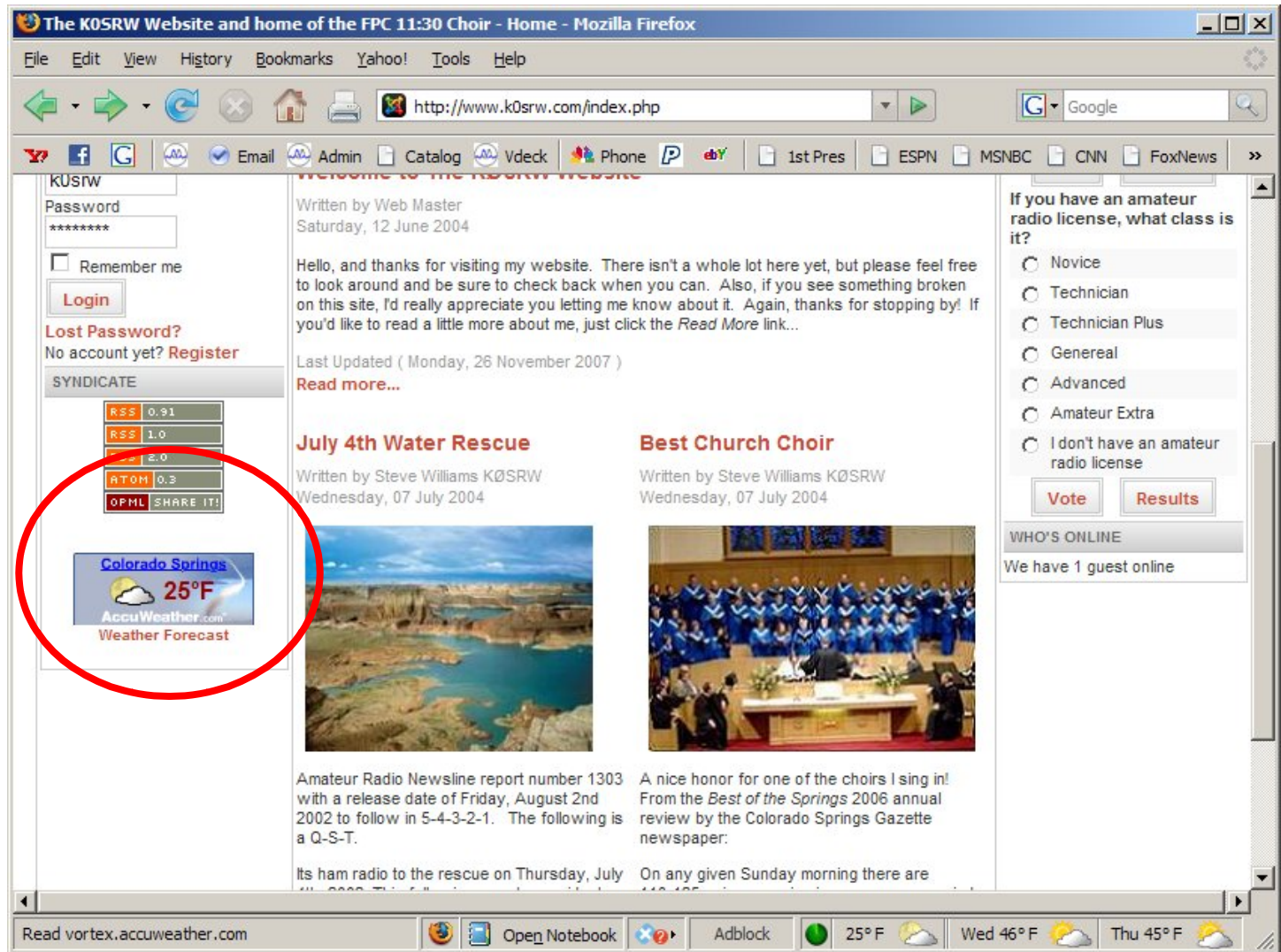
Whenever you change Joomla! files, it is good practice to leave a comment about your changes, along with your initials and date. That way, you can use search tools to find your changes if you ever need to revisit them. I've added a comment below. Note that a properly formatted HTML comment begins with "<!--", ends with "-->" and does not contain "--" or ">" anywhere in the comment.

```
mod_rssfeed.php - Notepad                                          _ □ ×
File  Edit  Format  View  Help

          // rss20 link
          if ( $rss20 ) {
                  $link = 'index.php?option=com_rss&amp;feed=RSS2.0&amp;no_html=1';
                  output_rssfeed( $link, 'rss20.gif', $rss20_image, 'RSS 2.0', 'RSS20' );
          }

          // atom link
          if ( $atom03 ) {
                  $link = 'index.php?option=com_rss&amp;feed=ATOM0.3&amp;no_html=1';
                  output_rssfeed( $link, 'atom03.gif', $atom_image, 'ATOM 0.3', 'ATOM03' );
          }

          // opml link
          if ( $opml ) {
                  $link = 'index.php?option=com_rss&amp;feed=OPML&amp;no_html=1';
                  output_rssfeed( $link, 'opml.png', $opml_image, 'OPML', 'OPML' );
          }
          ?>
</div>

<!-- SRW 12/19/07, added the following accuweather link.  -->

<div style='width: 120px; height: 60px; background-image: url(
http://vortex.accuweather.com/adcbin/netweather_v2/backgrounds/tornado_120x60_bg.jpg );
background-repeat: no-repeat; background-color: #;' ><div style='height: 48px;' ><script
src='http://netweather.accuweather.com/adcbin/netweather_v2/netweatherV2.asp?partner=netwea
ther&tStyle=normal&logo=1&zipcode=80920&lang=eng&size=7&theme=&metric=0&target=_self'></scr
ipt></div><div style='text-align: center; font-family: arial, helvetica, verdana,
sans-serif; font-size: 10px; line-height: 12px; color: ;' ><a style='color: #'
href='http://www.accuweather.com/us/CO/COLORADO
SPRINGS/80920/city-weather-forecast.asp?partner=accuweather&traveler=0' >Weather
Forecast</a></div></div>
```

Once you save the modified **modules/mod_rssfeed.php** file back to your site, you'll note that when you run your site, you see something like this:
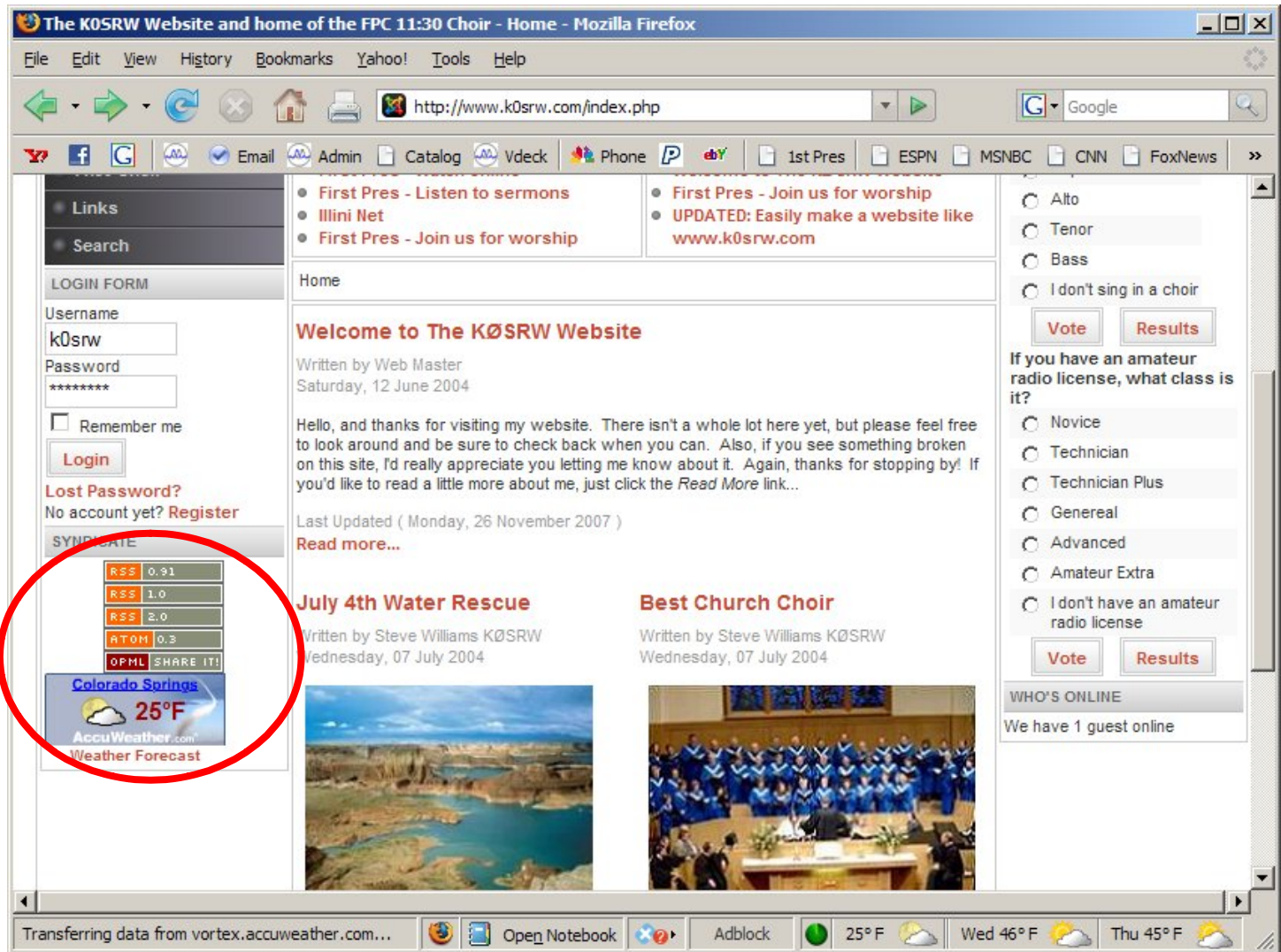
In my view, that doesn't look as nice as it could, so I added some space below the last syndication item. And, I centered the netWeather display. The HTML code for doing that is pretty simple, as shown below. (If you'd like to learn more about HTML, you might take a look at the great tutorials located here http://www.w3schools.com/html/default.asp.)

```
                    output_rssfeed( $link, 'rss20.gif', $rss20_image, 'RSS 2.0', 'RSS20' );
        }

        // atom link
        if ( $atom03 ) {
                $link = 'index.php?option=com_rss&amp;feed=ATOM0.3&amp;no_html=1';
                output_rssfeed( $link, 'atom03.gif', $atom_image, 'ATOM 0.3', 'ATOM03' );
        }

        // opml link
        if ( $opml ) {                     p?option=com_rss&amp;feed=OPML&amp;no_html=1';
                                           link, 'opml.png', $opml_image, 'OPML', 'OPML'  );
        }
        ?>
</div>

<!-- SRW 12/19/07, added the          r link.  -->
<br>
<br>
<div align="center">
<div style='width: 120px; height: 60px; background-image: url(
http://vortex.accuweather.com/adcbin/netweather_v2/backgrounds/tornado_120x60_bg.jpg );
background-repeat: no-repeat; background-color: #;' ><div style='height: 48px;' ><script
src='http://netweather.accuweather.com/adcbin/netweather_v2/netweatherV2.asp?partner=netwea
ther&tStyle=normal&logo=1&zipcode=80920&lang=eng&size=7&theme=&metric=0&target=_self'></scr
ipt></div><div style='text-align: center; font-family: arial, helvetica, verdana,
sans-serif; font-size: 10px; line-height: 12px; color: ;' ><a style='color: #'
href='http://www.accuweather.com/us/CO/COLORADO
SPRINGS/80920/city-weather-forecast.asp?partner=accuweather&traveler=0' >Weather
Forecast</a></div></div>
<br>
</div>
```

Callout: HTML
 tags give blank lines.

Callout: This construct centers everything in between.

Once you save these changes, you'll note that things look much better!

So now you've successfully made a non-Joomla! addition to your site!

Who is Using My Site?

Most people that operate their own websites like to know a little something about who is using their site, how long they stay on the site, what pages they visit, where they are in the world, etc. There are a number of tools available for doing this, but few are as simple, powerful and comprehensive as the free Google Analytics tool. I've used this on my personal site and on my company's site for many years with stellar results. You'll be amazed at the level of data that is collected and viewable!

You'll also be stunned by how simple it is to install! Normally, the installation requires that a snippet of code be added to each and every web page on your site. But, since Joomla! is a CMS, it really has only one web page who's content is dynamic and depends on what you've clicked within the site. So, the good news is that to install Google Analytics on a Joomla! site, the code snippet needs to be put in only one place. It couldn't be easier!

First, you'll need to sign up for Google Analytics. Point your browser to http://www.google.com/analytics/ to get started. You'll see a display like this:
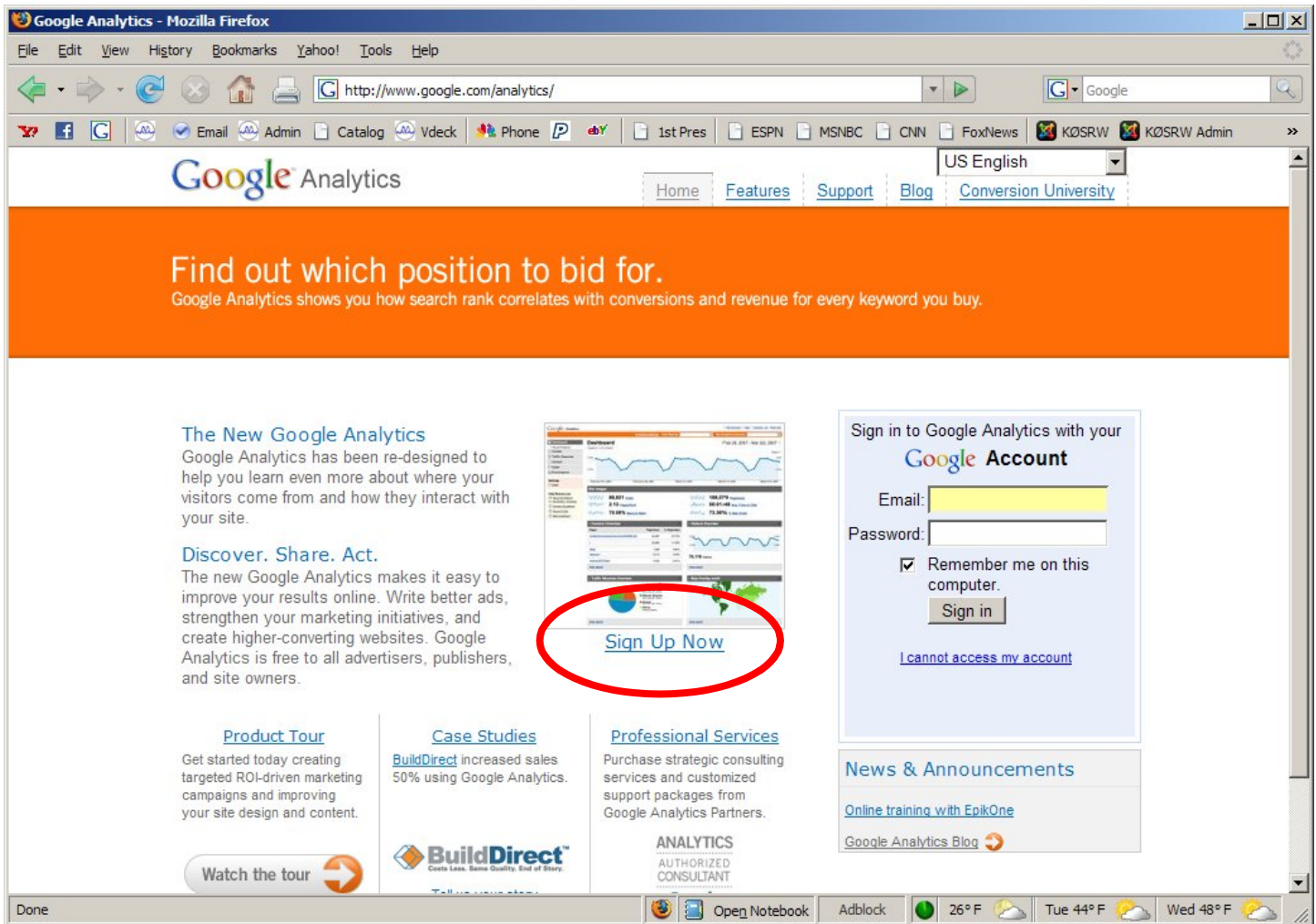
Click **Sign Up Now** link, and you'll be here:
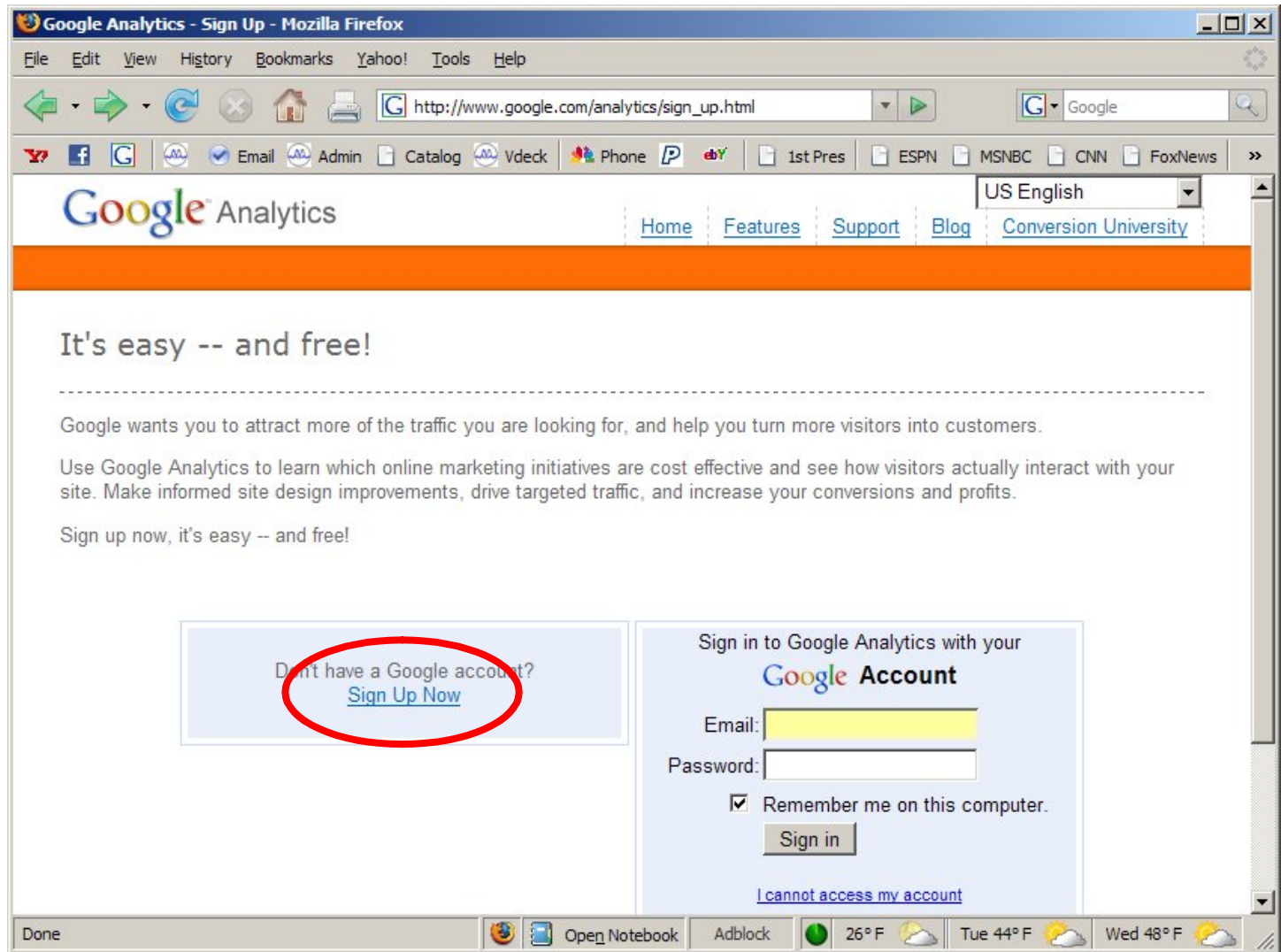
If you already have a Google account, go ahead and log in on the right. If not, click this page's **Sign Up Now** link. You are not creating a new email account through this process, just creating a Google account so you can use features like Google Analytics.

You'll see this page next:

Fill out the requested information, then click the **I accept. Create my account.** button near the bottom of the page.

You'll get an email from Google asking you to verify that you've intended to sign-up for Google Analytics. Just click on the link given in that email, and you'll be ready to go!

Once again now, navigate to http://www.google.com/analytics, and sign in with the email address and password you specified on the **Create an Account** screen earlier.

You'll see something like this:

Click the **Sign Up** button, and you'll be asked for some details about the site you want to monitor.

Once you've filled in the information requested, clicking the **Continue** button will take you to another information page.

Click **Continue** to review the **Terms of Service**…
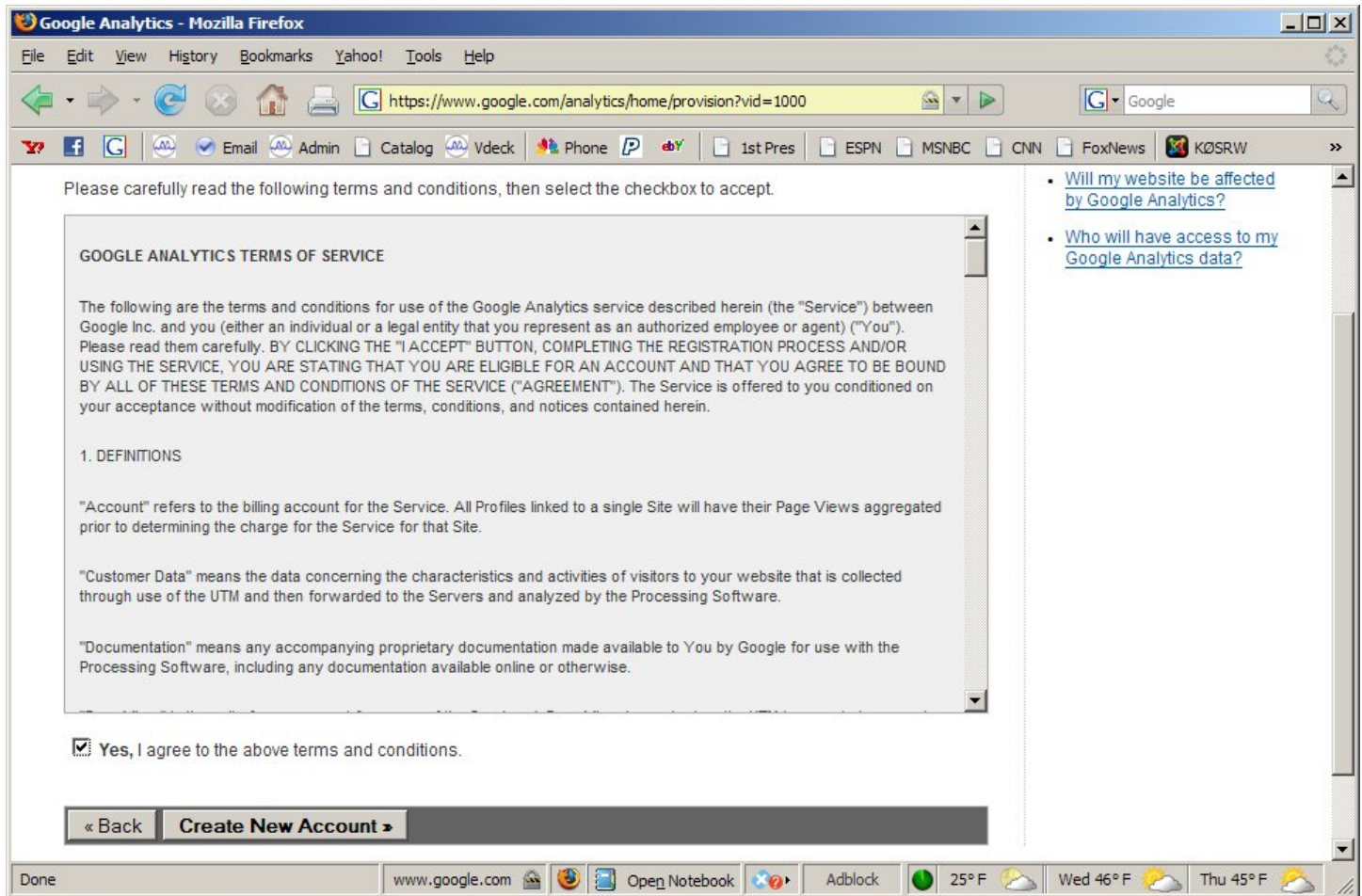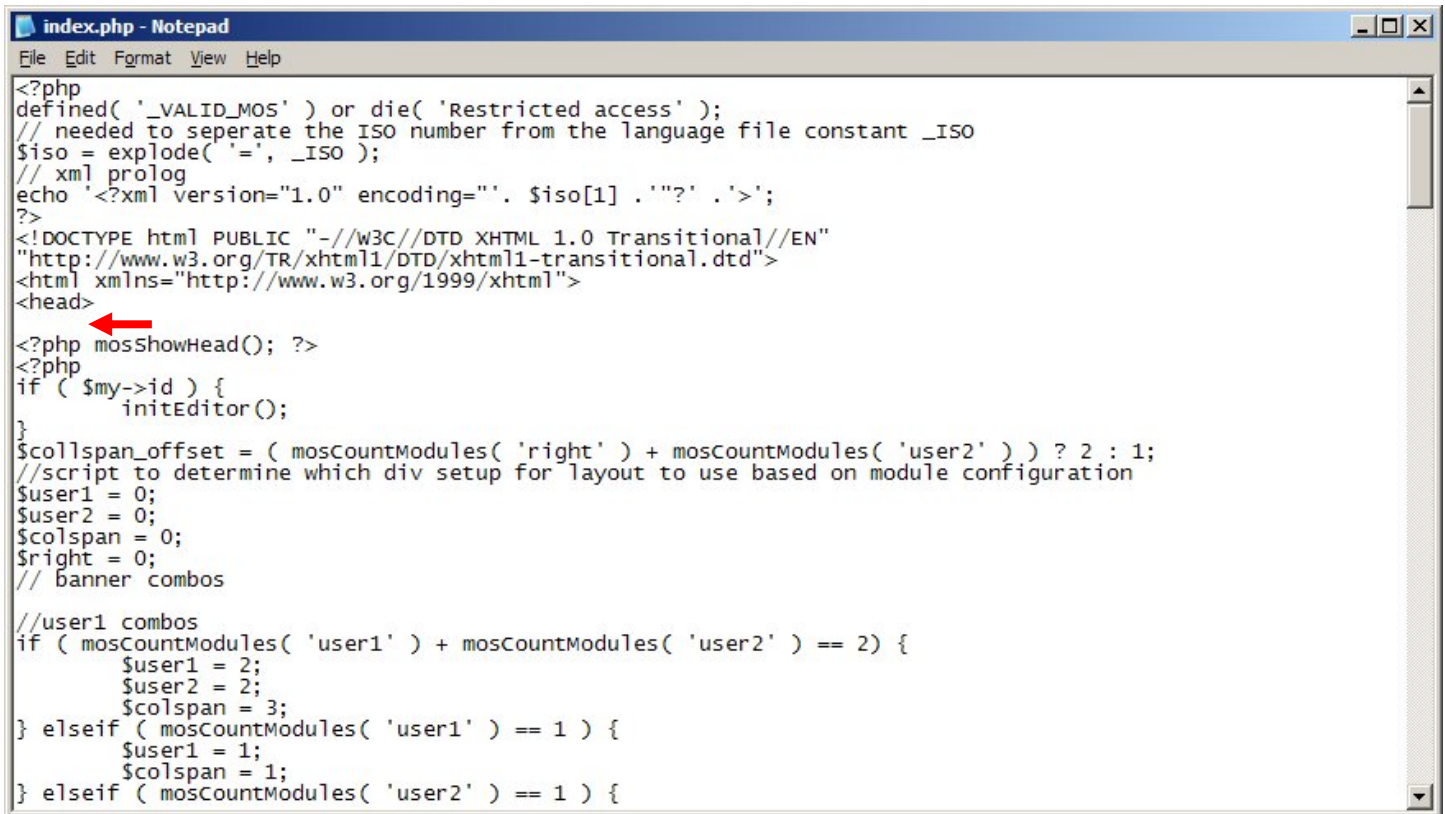
Finally, you'll see a display like the following one, where some **tracking code** is presented. Yours will vary somewhat from what you see below, based on your site name, your account, and some numerical information that is presented. The tracking code essentially allows your site to give Google Analytics some data each time the tracking code is encountered. Therefore, the tracking code needs to be placed where all site activities will invoke it. In most non-CMS systems, many, many placements would be necessary. In Joomla! the code goes only in one place, which I'll show you in just a moment.
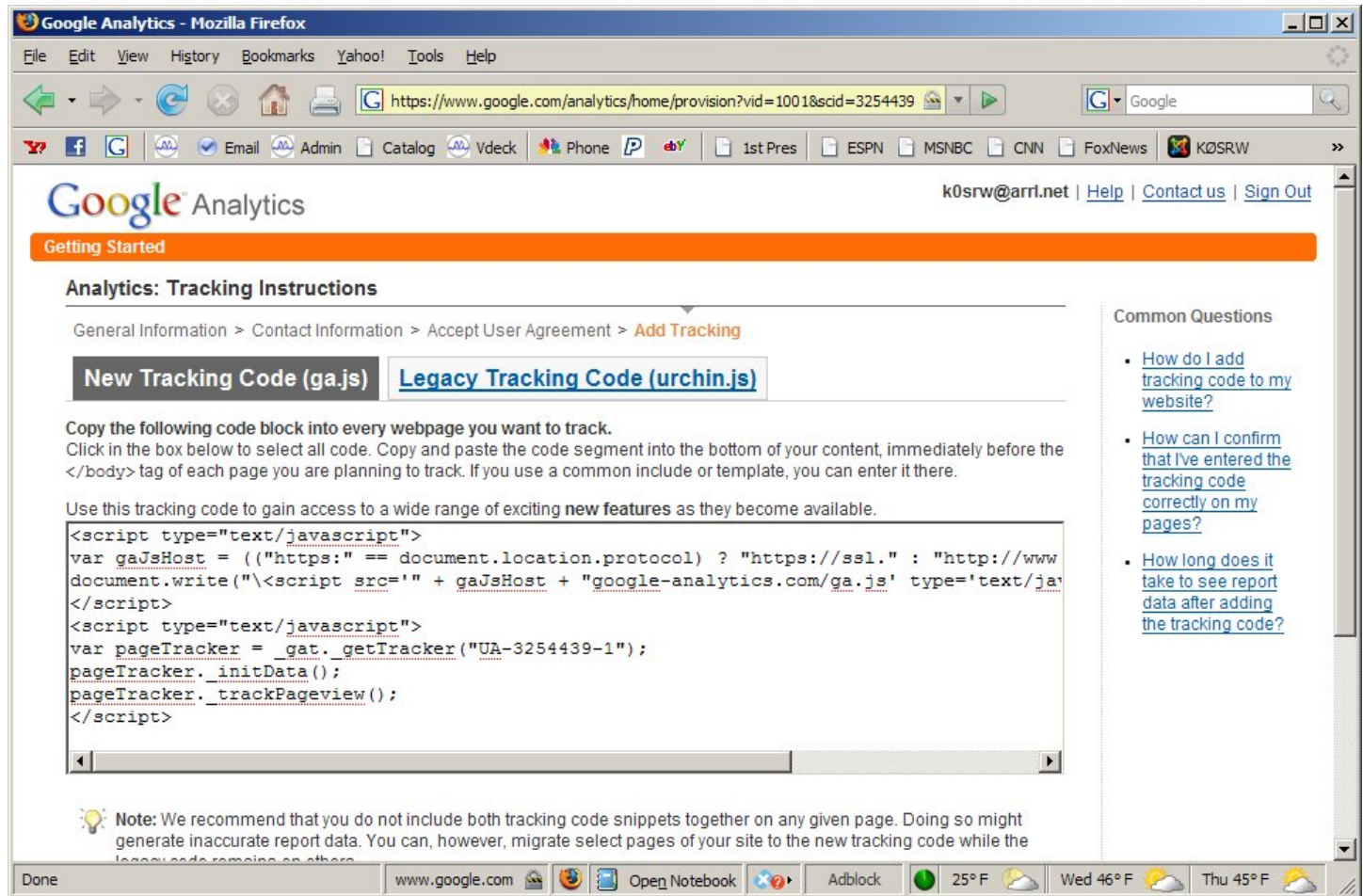
Just left-click on the tracking code, then as before, right-click the highlighted area and select **Copy**. That process will put the tracking code into your copy buffer.

Next, use your FTP tool (CuteFTP, for example), to connect to your site and locate the **templates\rhuk_solarflare_ii\index.php** file. My site uses a template named "rhuk_solarflare_ii", but if you've changed your site's template, you'll need to substitute your template name in for the **rhuk_solarflare_ii** portion of the directory name.

When you open the **index.php** file, you'll see something like this:

At the location of the red arrow above, paste in the tracking code, and add comments as described earlier.

Save the modified **index.php** file back to your site, and you'll be in business. You should navigate through a few pages on your site, just to be sure that the code and comments were inserted without causing errors.

Head back to the Google Analytics site (http://www.google.com/analytics) and sign in again. You'll probably see a display like this one, where you'll see an indication that the tracking code hasn't yet been verified:

Clicking the **Check Status** link will cause Google Analytics to automatically verify proper installation of the tracking code on your site. With any luck, you'll receive an indication that Google Analytics is receiving data as shown below:

Although Google Analytics won't yet have collected much data from your site, you'll soon see valuable usage information pouring in!

To start looking at your data, just click the **View Reports** link above, and you'll end up at the Google Analytics **Dashboard**:
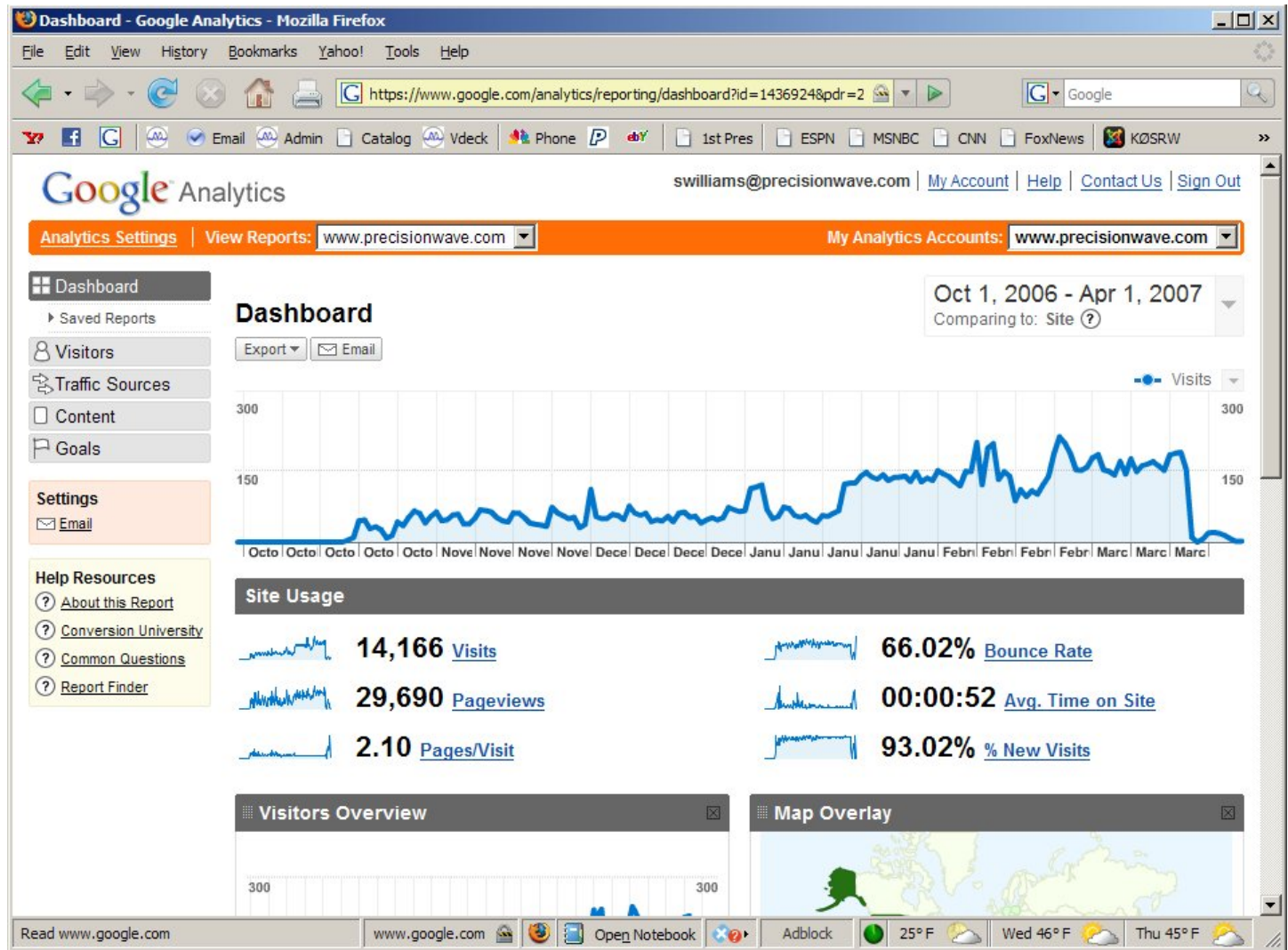
This gives you a quick summary of your site's activity, and is the starting point for really drilling down into the data. (These reports are from www.precisionWave.com rather than www.k0srw.com since precisionWave had a bit more activity than my personal site.)

Roll down in the dashboard, and click the **view reports** link in the **Map Overlay** area. From here, you'll be able to see geographically where your site's activity is coming from. In this case, increasing levels of activity are denoted by deeper shades of green.
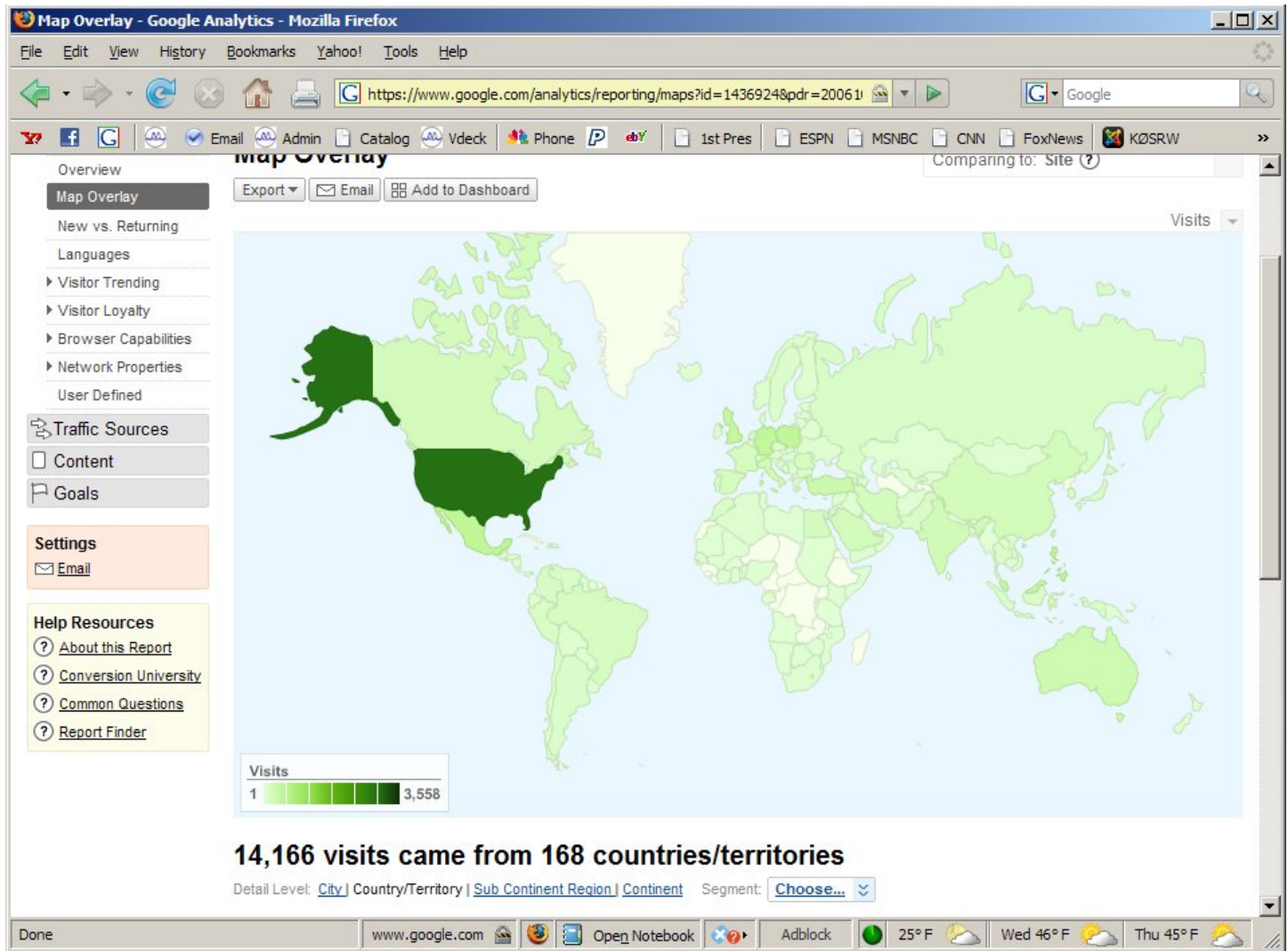
You can roll down in the **Map Overlay** view to get more detail about your geographical access:
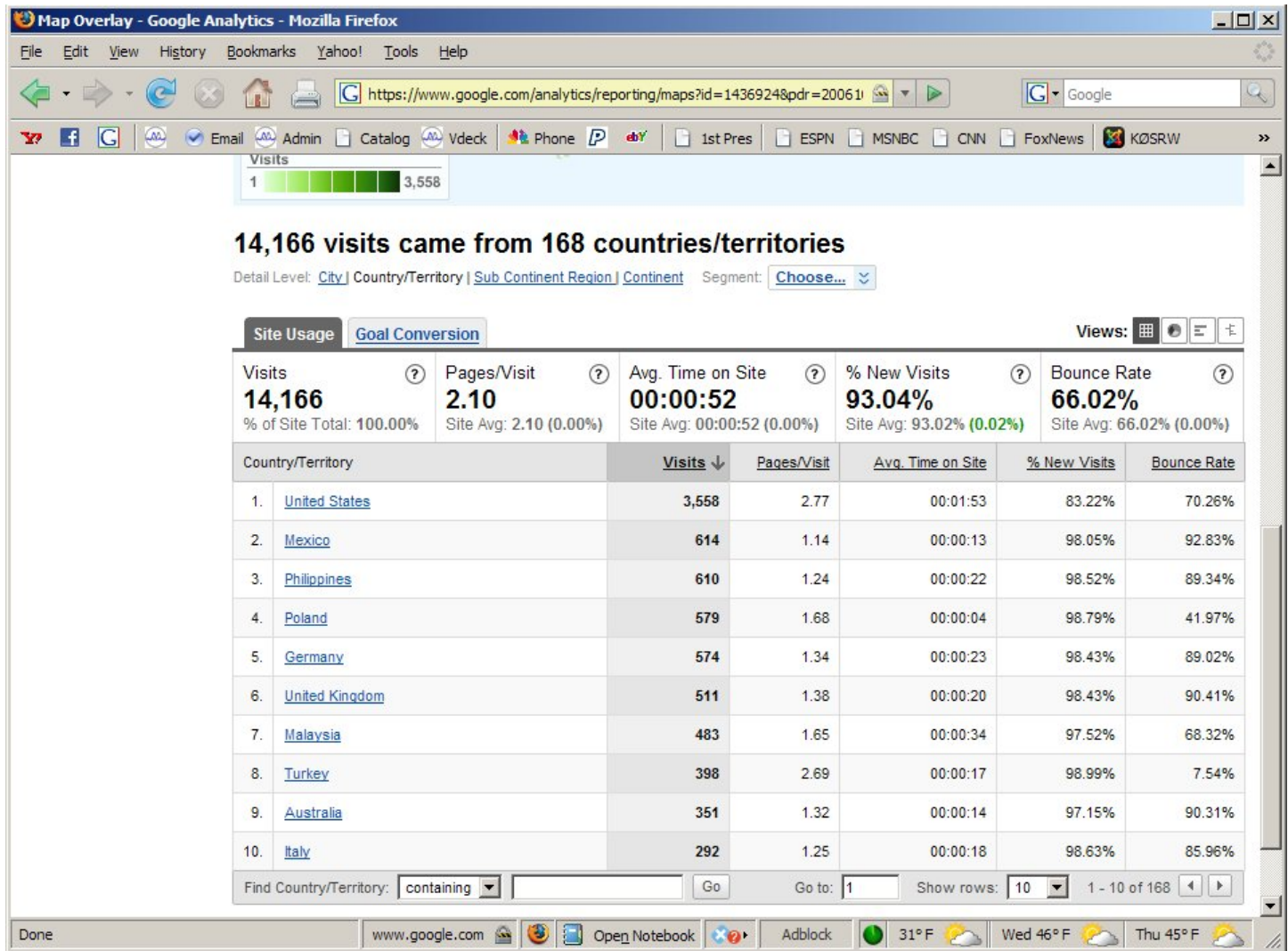
And of course, you can click on a country name to see more detail about the site hits from that location:

And so it goes. Google Analytics will provide tons of detail about where your users are, what browsers they use, how they got to your site, what they did on their site, how they left your site, how long they were there, and much more! Enjoy using the amazing Google Analytics tool, and be sure to explore the wealth of reports and help available.

If you're really ambitious, you can set up **Google AdWords** so that your site shows up front-and-center when users type specific queries into Google's search capability. **Google AdWords** is a pay-per-click system, so each time users click one of your links that appear, you'll owe Google some money. How much per click? That depends on the popularity of the search string you want to appear under, and it depends on how much other people are paying to appear with that search string. The more you pay per click, the higher your ads appear in the results.
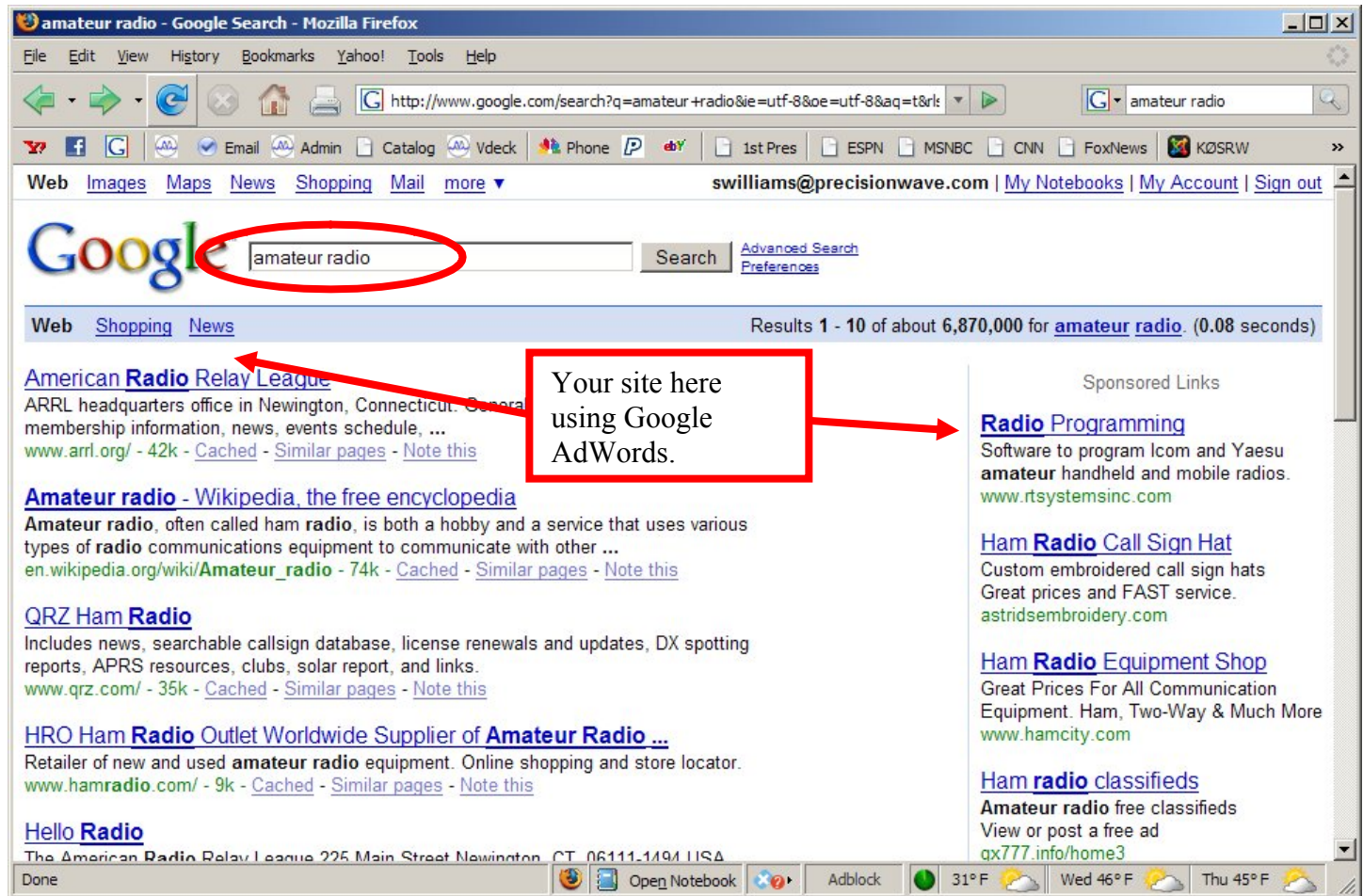
The are other ways to move your site up in the organic search results without having to use something like Google AdWords. Some of these methods are legitimate, and others are not. If you'd like to move up legitimately, then I'd recommend the book **Search Engine Optimization for Dummies** by Peter Kent. It's a quick read, and it exposes you to some great techniques as well as those to stay away from!

Summary

Nothing short of several textbooks on the topic can expose you to all that there is to know about Joomla! And even those textbooks would be out of date by the time they're written and in print. So, this short article series had no hope of telling you absolutely everything, but instead, had the goal of getting you started and exposed to the "art of the possible."

Sprinkled throughout the series, I've listed several important web references where you can find a vast amount of additional information and help. And, as I just discovered a few minutes ago, YouTube (http://www.youtube.com) has pages and pages of videos on various Joomla! topics. What will they think of next?

Anyway, I hope you've enjoyed this series and that it's perhaps scratched a creative itch. Why not use some lazy winter weekends to give Joomla! a try? When you're ready, drop me an email at k0srw@earthlink.net with the URL to your new Joomla! based web site. I'd love to see your work!

Closing Thought

Before I wander off and forget to mention this, Joomla! promotion, support and development requires significant effort and considerable financial resources. If you like what you see in Joomla!, please consider a voluntary donation. You can read more about this matter on the Joomla! donations page at http://www.joomla.org/content/view/689/79/.

Have fun building, tracking and promoting your site!

73,

Steve Williams, KØSRW
Colorado Springs, CO